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=> s vitamin D3

L1 20496 VITAMIN D3

=> s aldose reductase inhibitor

L2 5852 ALDOSE REDUCTASE INHIBITOR

=> s aldose reductase inhibitor or flavonoid or quercetin or quercetin or myricetin or kaempferol or myrecetin

L3 64645 ALDOSE REDUCTASE INHIBITOR OR FLAVONOID OR QUERCETIN OR QUERCETR  
IN OR MYRICETIN OR KAEMPFEROL OR MYRECETIN

=> s 11 and 13

L4 48 L1 AND L3

=> s antioxidant or vitamin C or ascorbic acid or vitamin A or vitamin E or lipoic acid or catechin or glangin or rutin or luteolin or morin or fisetin or gingkolides or hesperitin or cyanidin or citrin

2 FILES SEARCHED...

4 FILES SEARCHED...

L5 270017 ANTIOXIDENT OR VITAMIN C OR ASCORBIC ACID OR VTAMIN A OR VITAMIN  
E OR LIPOIC ACID OR CATECHIN OR GLANGIN OR RUTIN OR LUTEOLIN  
OR MORIN OR Fisetin OR GINGKOLIDES OR HESPERITIN OR CYANIDIN  
OR CITRIN

=> s 14 and 15

L6 40 L4 AND L5

=> s 16 and py<2000

3 FILES SEARCHED...

L7 26 L6 AND PY<2000

=> dup rem

ENTER L# LIST OR (END):17

PROCESSING COMPLETED FOR L7

L8 25 DUP REM L7 (1 DUPLICATE REMOVED)

=> d 18 1-25 ab kwic bib

L8 ANSWER 1 OF 25 USPATFULL

AB Chicken egg containing a synergistic composition of antioxidants and low

poly-unsaturated fatty acids (PUFA). The egg includes no more than 15.5%

PUFA of the eggs fatty acid and controlled amounts of vitamin E, iodine, edible carotenoids and additional edible antioxidants. The egg provides an antioxidant environment which reduces the oxidizability of consumer's LDL, which is accepted as a risk factor for cardiovascular diseases. The egg is produced by maintaining an

and egg laying chicken on a regime wherein conventional feed ingredients supplements are selected to provide about 0.7-1.5 wt. % PUFA of its entire diet, controlled amount of **vitamin E**, iodine, edible carotenoids and additional antioxidants.

PI US 6156351 20001205  
WO 9711596 19970403 <--  
AB of . . . fatty acids (PUFA). The egg includes no more than 15.5% PUFA

the eggs fatty acid and controlled amounts of **vitamin E**, iodine, edible carotenoids and additional edible antioxidants. The egg provides an antioxidative environment which reduces the oxidizability of consumer's LDL, . . . feed ingredients and supplements are selected to provide about 0.7-1.5 wt. % PUFA of its entire diet, controlled amount of **vitamin E**, iodine, edible carotenoids and additional antioxidants.

SUMM 2. "Inverse correlation between plasma **vitamin E** and mortality from ischemic heart disease in cross-cultural epidemiology" K. Fred Gey et al., Am. J. Clin. Nutr. 1991; 53:626S-34S.. . .

SUMM 4. "Comparative Study on the Effect of Low-Dose **Vitamin E** and Probucol on the Susceptibility of LDL to Oxidation and the Progression of Atherosclerosis in Watanabe Heritable Hyperlipidemic Rabbits", Kleinveld, . . .

SUMM 7. "Dietary Supplementation with **Vitamins C** and **E** inhibits in Vitro Oxidation of Lipoproteins" Rifici, V. A. et al., J. AM. Coll. Nutr. 12:631-637, 1993.

SUMM 8. "**Vitamin E** consumption and the Risk Coronary heart Disease in Men" Rimm, EE. B. New Engl. J. Med. 328:1450-1456, 1993.

SUMM . . . oxidation of human low density lipoprotein depend on the ratio of oleic acid content to linoleic acid content: studies in **vitamin E** deficient subjects; Kleinveld et al.; Free radic. med. 1993 SIP 15 (3) 273-80).

SUMM It is well known that various egg components are affected by the chicken feed, e.g., **vitamins E**, A and other vitamins. See: Modifying Vitamin Composition of eggs: A review by E. C. Naber. J. Applied poultry res.. . .

SUMM . . . is possible to enrich these components in the egg significantly. However, supplemental .beta.-Carotene may markedly decrease the yolk deposition of **vitamin E**. Moreover, .beta.-carotene is most intensively transformed in the chicken to vitamin A and only traces of it attain the yolk. . .

SUMM In the present invention those principles were applied to obtain an egg comprising more iodine, carotenoids and **vitamin E**.

SUMM A recent research on antioxidants showed that adding **vitamin E** which increased LDL content 2.5 times the baseline amount, reduced the reactivity of LDL to oxidation by 50%. See: Effect of dietary antioxidant combinations in humans, protection of LDL by **vitamin E** but not by .beta.-carotene, Reaven et al., 1993, Arterioscler-Thromb Apr. 13(4)590-600.

SUMM As in the process of oxidation-protection, **vitamin E** itself is consumed, and thus its concentration should be increased in proportion to PUFA. The generally accepted ratio being between 0.4-0.6 mg **vitamin E**/1 gram PUFA.

SUMM . . . vitamins (antioxidants) becoming a proxidant and then facilitating oxidation. Thus, it might not be enough to increase the amount of **vitamin E** but rather provide further protection, e.g. by carotenoids, **vitamin C**, **flavonoids** and/or other antioxidants, to create a synergistic effect in antioxidative process.

SUMM **Vitamin E** also protects other antioxidants, e.g., carotenoids. Thus, it enhances pigmentation in the yolk (See: "Oxycarotenoids in Poultry Feeds, Carotenoids as. . .

SUMM . . . the egg's fatty acid concentration and not more than 1.5 wt. % of same in the egg; (b) 2-11 mg **vitamin E** per 59

grams of whole shell egg; per 50 grams of liquid egg; or per 16.6 grams of yolk; (c). . . .

SUMM . . . egg comprising (a) not more than 15.5% poly unsaturated fatty acids of the egg's fatty acids concentration; (b) 2-11 mg **vitamin E** per 59 grams of whole shell egg; (c) 40-112 .mu.g iodine per 59 grams of whole shell egg; and (d). . . .

SUMM According to still further features in the described preferred embodiments the egg comprising 2 to 9 mg of **vitamin E** per 59 grams of whole shell egg.

SUMM According to still further features in the described preferred embodiments the egg comprising 4 to 9 mg of **vitamin E** per 59 grams of whole shell egg.

SUMM . . . embodiments the antioxidants are selected from the group consisting of BHT, EMQ, N,N-diphenyl-p-phenylenediamine (DPPD), Ionol, Diludin, Digisan, Tanan, Kurasan, Phenol, **Flavonoids**, Hydroxyflavone, Galanin, Quercetine, Catechines, Ubiquinol, Selenium, **Vitamin C** and mixtures of the above.

SUMM According to still further features in the described preferred embodiments the source of **Vitamin E** is selected from the group consisting of alfalfa meal/concentrate, pure **vitamin E**, salts thereof, and mixtures of the foregoing.

SUMM . . . the amount of poly-unsaturated fatty acids being about 0.7-1.5 wt. % of the entire diet, further supplemented with iodine and **vitamin E**, such that the iodine content of the feed is from 2.5 to about 7.5 mg per kg of feed and the **vitamin E** content of the feed is from about 100 to about 300 mg per kg of feed, and still further supplemented. . . .

DRWD FIG. 1 shows the effect of control, **vitamin E** enriched and **vitamin E** enriched low PUFA two daily eggs on LDL oxidizability; and

DRWD FIG. 2 shows the effect of **vitamin E** enriched low PUFA two daily eggs on LDL oxidizability.

DETD . . . of the egg's fatty acid concentration and/or not more than 1.5 wt. % of same in the egg; 2-11 mg **vitamin E** per 59 grams of whole shell egg; per 50 grams of liquid egg, or per 16.6 grams of yolk; 40-112. . . .

DETD These antioxidants may be selected, e.g., among: synthetic antioxidants which have been found to protect **vitamin E**, Carotenoids, PUFA, etc., such as BHT, EMW, N,N'-diphenyl-p-phenylenediamine (DPPD), Ionol, Diludin, Digisan, Tana, Kurasan, etc.; Phenolos and **Flavonoids** from herbs and plants, e.g., sage, Rosemarine, green and block tea, etc.; or pure forms like Hydroxyflavone, Galanin, Quercetine, Catechines, ubiquinol, etc.; Selenium; **vitamin C** (As Ascorbic Acid or Ascorbyl Esters); mixtures of the above; etc.

DETD A preferred egg comprises 2 to 9 mg, advantageously 4 to 9 mg, of **vitamin E** per 59 grams of whole shell egg; per 50 grams of liquid egg; or per 16.6 grams of egg yolk.

DETD The source of **vitamin E** is advantageously alfalfa meal/concentrate or pure **vitamin E** or salts thereof or mixtures of them.

DETD . . . chicken eggs (as defined above) which consists in feeding chickens with a standard feed mixture comprising low PUFA supplemented with **vitamin E**, iodine and carotenoids in amounts ascertaining that the eggs so produced contain the target amounts of said ingredients.

DETD Should other antioxidants besides carotenoids and **vitamin E** have to be present they are fed to the chicken in adequate amounts.

DETD . . . of the entire diet, at the utmost 20-45% of the total fatty acids (preferably 35%) further supplemented with iodine and **vitamin E**, such that the iodine content of the feed is from 2.5 to about 7.5 mg per kg of feed, and the **vitamin E** content of the feed is from about 100 to about 300 mg per kg of feed, (preferably 100 mg/kg), further. . . .

DETD The term "Enriched" as used herein refers to diet 2 and/or eggs enriched

with **vitamin E**, Iodine and Carotenoids.

DETD Rice Hulls, Dehydrated Alfalfa Meal, Rice Bran, Dehydrated Kelp, Vitamin

A Supplement, **Vitamin D3** Supplement, **Vitamin E** Supplement, Menadione Sodium Bisulfite Complex, Riboflavin Supplement, d-Calcium Pantothenate, Niacin Supplement, Vitamin B12 Supplement, Pyridoxine Hydrochloride, Thiamine Mononitrate, Folic Acid, . . .

DETD The eggs enriched with **vitamin E**, iodine and carotenoids; and control eggs were daily collected in an air-conditioned room or refrigerator and were weekly transported to. . .

DETD . . . by canola oil  
\*\*\*In diets 2 and 3 the Biotene Total PX (England's Best) premix was enriched with I and **vitamin E**. Diet 1 (control) contained a commercial premix of Koffolk Ltd.

DETD **Vitamin E**, iodine and fatty acids were determined on pooled samples of three eggs per group. Egg **vitamin E** was determined in HPLC according to J. Food Sci. 1993 (p. 669). Egg iodine was determined according to the Food. . .

DETD Egg **vitamin E** and iodine of layers on enriched and control regime: As shown in Table 4, eggs iodine and **vitamin E** levels were determined several times during the experiment.

DETD TABLE 4

Egg **vitamin E** and iodine of layers on enriched and control regime

Age (wks)	27	29	31	41
-----------	----	----	----	----

Dietary tocopheryl acetate (mg/kg feed)

Control -- -- . . .

DETD When measured at 31 weeks of age, dietary **vitamin E** (tocopheryl acetate) was 5-fold higher in the enriched than in the control groups (159 and 28.6 mg/kg diet, respectively).

DETD 2. Three weeks with 2 eggs daily enriched with iodine, **vitamin E** and carotenoids.

DETD . . . (of Baseline), thereafter 3, 6, and 9 weeks on the 2 eggs feeding regime and tested for blood chemistry, lipids, **vitamin E**, carotenoids, cholesterol, and LDL oxidation.

DETD . . . significant effect of the enriched eggs on the plasma antioxidants. Compared to the baseline and after 3 weeks levels, the **vitamin E**, vitamin A and carotenoids increased (average of results after 6 and 9 weeks) by 34%, 26.5% and 49%, respectively. These. . .

DETD TABLE 8

Plasma **Vitamins E, A** and Carotenoids following eggs consumption

(mg/dl)

Time on 9 Weeks

Eggs Sup-

0	3 Weeks	6 Weeks	Enriched
---	---------	---------	----------

plement

Baseline	Control	Eggs
		Enriched Low PUFA

**Vitamin E**

43 .+-.	6	44 .+-.	8	63 .+-.	17*
				54 .+-.	11*

**Vitamin A**

0.55 .+-.	0.11
0.58 .+-.	0.13
	0.77. . .

DETD As can be seen, eating 2 control eggs significantly increased the oxidizability of plasma-LDL. Enriching with iodine, **vitamin**

**E** and carotenoids was not enough to restore the protection on LDL, unless the PUFA percentage was reduced in the feed. . . .

DETD On this regime the plasma level of antioxidants (Table 8) i.e., **vitamins E, A** and carotenoids were increased by 23%, 14% and 55%, respectively. This emphasizes the potential contribution of each of the. . .

DETD The following examples represent low PUFA feed mixtures. The enrichment with iodine, **vitamin E** and carotenoids should preferably be formulated and based on the calculations of the ingredients in the premix. Special Attention should. . . .

CLM What is claimed is:

1. egg comprising: (a) not more than 15.5% poly unsaturated fatty acids of the egg's fatty acids concentration; (b) 2-11 mg **vitamin E** per 59 grams of whole shell egg; and (c) 10-60 .mu.g of edible carotenoids per gram of egg yolk.

2. An egg according to claim 1, comprising 2 to 9 mg of **vitamin E** per 59 grams of whole shell egg.

3. An egg according to claim 1, comprising 4 to 9 mg of **vitamin E** per 59 grams of whole shell egg.

4. . . wherein said antioxidants are selected from the group consisting of BHT, EMQ, N,N-diphenyl-p-phenylenediamine (DPPD), Ionol, Diludin, Digisan, Tanan, Kurasan, Phenols, **Flavonoids**, Hydroxyflavone, Galanin, Quercetine, Catechines, Ubiquinol, Selenium, **Vitamin C** and mixtures of BHT, EMQ, N,N-diphenyl-p-phenylenediamine (DPPD), Ionol, Diludin, Digisan, Tanan, Kurasan, Phenols, **Flavonoids**, Hydroxyflavone, Galanin, Quercetine, Catechines, Ubiquinol, Selenium and **Vitamin C**.

5. An egg according to claim 1, wherein the source of **Vitamin E** is selected from the group consisting of alfalfa meal/concentrate, pure **vitamin E**, salts of **vitamin E**, and mixtures of alfalfa meal/concentrate, pure **vitamin E** and salts of **vitamin E**.

6. . . acids, the amount of poly-unsaturated fatty acids being about 0.7-1.5 wt. % of a diet of the chickens, further supplemented **vitamin E**, such that the **vitamin E** content of the feed is from about 100 to about 300 mg per kg of feed, and still further supplemented.

7. . . eggs comprises: (a) not more than 15.5% poly unsaturated fatty acids of the egg's fatty acids concentration; (b) 2-11 mg **vitamin E** per 59 grams of whole shell egg; and (c) 10-60 .mu.g of edible carotenoids per gram of egg yolk.

8. The method of claim 21, wherein each egg comprises 2 to 9 mg of **vitamin E** per 59 grams of whole shell egg.

9. The method of claim 25, wherein each egg comprises 4 to 9 mg of **vitamin E** per 59 grams of whole shell egg.

10. . . wherein said antioxidants are selected from the group consisting of BHT, EMQ, N,N-diphenyl-p-phenylenediamine (DPPD), Ionol, Diludin, Digisan, Tanan, Kurasan, Phenols, **Flavonoids**, Hydroxyflavone, Galanin, Quercetine, Catechines, Ubiquinol, Selenium, **Vitamin C** and mixtures of BHT, EMQ, N,N-diphenyl-p-phenylenediamine (DPPD), Ionol, Diludin, Digisan, Tanan, Kurasan, Phenols, **Flavonoids**, Hydroxyflavone, Galanin, Quercetine, Catechines, Ubiquinol, Selenium and **Vitamin C**.

11. The method of claim 21, wherein the source of **Vitamin E** is selected from the group consisting of alfalfa

meal/concentrate, pure vitamin E, salts of  
vitamin E, and mixtures of alfalfa meal/concentrate,  
pure vitamin E and salts of vitamin  
E.

AN 2000:164111 USPATFULL  
TI Eggs with a mixture of antioxidants and low amounts of poly-unsaturated  
fatty acids|  
IN Shapira, Niva, 5 Kehilat Zitomir, Neot Afeka, 69405 Tel Aviv, Israel  
PI US 6156351 20001205  
WO 9711596 19970403 <--  
AI US 1998-43058 19980311 (9)  
WO 1996-IL103 19960908  
19980311 PCT 371 date  
19980311 PCT 102(e) date  
PRAI IL 1995-115307 19950914  
DT Utility|  
EXNAM Primary Examiner: Weier, Anthony J.|  
CLMN Number of Claims: 37|  
ECL Exemplary Claim: 1|  
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)|  
LN.CNT 1052|

L8 ANSWER 2 OF 25 USPATFULL

AB The invention concerns novel bi-aromatic dibenzofuran derivatives of  
formula (I), and their use in pharmaceutical compositions for human or  
veterinary medicine (skin, rheumatic respiratory, cardiovascular, and  
ophthalmologic disorders), or in cosmetic compositions as well. The X,  
Ar, R.sub.1 and R.sub.2 in formula (I) are defined in the  
specification.

##STR1##  
PI US 6057341 20000502  
WO 9817659 19980430 <--  
SUMM Antioxidants is understood to mean, for example, *α*-tocopherol or its  
derivatives, **flavonoids**, antioxidants of the BHT or BHA type  
or their derivatives, **ascorbic acid** or certain  
metal-chelating agents.  
SUMM . . . or *α*-keto acids or their derivatives is understood to  
mean, for example, lactic, malic, citric, glycolic, mandelic, tartaric,  
glyceric or **ascorbic acids** or salicylic acid  
derivatives or their salts, amides or esters.

DETD  
Compound of Example 15 0.500 g  
Vitamin D3 0.020 g  
Cetyl alcohol 4.000 g  
Glyceryl monostearate 2.500 g  
PEG 50 stearate 2.500 g  
Karite butter 9.200 g  
Propylene. . .

AN 2000:54124 USPATFULL  
TI Bi-aromatic dibenzofuran derivatives and their use in human and  
veterinary medicine and in cosmetics  
IN Charpentier, Bruno, Biot, France  
PA Centre International de Recherches Dermatologiques Galderma, Valbonne,  
France (non-U.S. corporation)  
PI US 6057341 20000502  
WO 9817659 19980430 <--  
AI US 1998-91813 19980904 (9)  
WO 1997-FR1878 19971020  
19980904 PCT 371 date  
19980904 PCT 102(e) date  
PRAI FR 1996-9512914 19961023  
DT Utility|  
EXNAM Primary Examiner: Trinh, Ba K.  
LREP Burns, Doane, Swecker & Mathis, L.L.P.  
CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1059

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 25 USPATFULL

AB The present invention pertains generally to the field of Public Health, including the prevention and treatment of coronary heart disease which is currently the first cause of death in the American population. More specifically, the present invention concerns a total modular system of multivitamin and mineral supplementation composed of 7 distinct modules for improving public health by insuring adequate intake of micronutrients needed for disease prevention and protection against nutritional losses and deficiencies due to, for example, lifestyle factors and common inadequate dietary patterns. A module, as used

herein

throughout, is defined as a separate and distinct combination of vitamin-mineral and other health promoting compounds which are directed to specific target populations. The formulations of the present invention which, when combined in one capsule or tablet or as separate modules, exert a joint and enhancing effect on the major pathogenetic factors involved in the atherosclerotic process. Moreover, certain modular formulations of the present invention incorporate both antioxidants and acetylsalicylic acid (aspirin) as a single preventive modality. Such a combination of antioxidants and aspirin is believed to act to prevent oxidation of low density lipoproteins within coronary arterial walls and to cause platelet deagglutination thereby inhibiting thrombus formation. The benefit of preventing these two major processes is believed to reduce the risk of coronary heart disease.

PI US 5976568 19991102

<--

SUMM . . . specific vitamins and minerals. The importance of these findings relate to the prevention of micronutrient deficiency diseases such as scurvy (**vitamin C** deficiency), pellagra (niacin deficiency), beri-beri (vitamin B1 deficiency), iron deficiency anemia and other vitamin and mineral deficiency states. The effect. . .

SUMM . . . are designed without consideration for micronutrient interactions. Examples of the significance of these reactions is the required presence of optimal **vitamin C** for the absorption of iron, the presence of Vitamin D for the absorption of calcium, and the mutually protective effects. . .

SUMM . . . it was discovered that the oxidation of LDL could be prevented significantly by micronutrient antioxidants such as beta carotene and **vitamin E**.

SUMM . . . aging process. Animal and human studies gave further impetus to

these findings when it was shown that specific micronutrients, notably **vitamin E**, substantially blocked the induction of free radicals. Later, it was documented that lipid peroxidation formed free radicals with release of. . .

SUMM . . . in humans by significantly reducing diene formation. Mackness, M. I., et al. (1993) Biochem. J. 294 (Part 3): 829-834. Dietary **vitamin E** levels in the serum were studied in relation to in vitro oxidation of LDL and VLDL, and were found to. . .

SUMM . . . increase requirements for nutrients. For example, exercise increases the need for vitamin B2 and chromium. Smoking increases the need for **vitamin C**. Niacin influences cholesterol metabolism. Chromium potentiates insulin function which affects blood sugar levels.

SUMM . . . environmental factors which contribute to the aging process including the effects of solar radiation, pollution and other toxicants.

For example, **vitamin C** maintains healthy connective tissue, and **vitamin E**, and the carotenoids, especially lycopene, protect against ultraviolet radiation.

SUMM . . . diets can deplete minerals such as calcium, zinc and iron which

are provided in the formula. Increasing intake of dietary **Vitamin E** and other polyunsaturates increases the need for antioxidants, these micronutrients are provided for in the formulation.

SUMM . . . the use of aspirin without interference by excessive dosages of

nutrients which may contribute to decreased blood clotting, such as **vitamin E**. In addition, the Modular 1 composition contains appropriate levels of folic acid, vitamin B12 and vitamin B6 which reduce homocysteine. . . .

SUMM . . . dosage of one nutrient, may affect the absorption or utilization of another vitamin or mineral. For example, one function of **vitamin C** is to facilitate iron absorption, Fairbanks, V. S., Iron in medicine and nutrition, in Shils, E. M., et al Modern.

SUMM . . . the immune system. See Chandra, R. K. Excessive Intake of Zinc Impairs Immune Responses, JAMA 1984; 252:1443-6. High levels of **vitamin E** and D decrease the activation of interleukin 2; thus, the formulations of the present invention do not use megadoses of. . . .

SUMM . . . must be adequate to assure proper immune functions. Many persons, especially the elderly are at risk for low intakes of **vitamins C, E, B6**, and zinc in their diet. The stress

Module 2 increases the levels supplied of these nutrients.

SUMM Modules 1, 2 and 3 provide a natural form of **vitamin E** (d-alpha tocopherol) which is 36% more active than a less expensive synthetic **vitamin E** (dl-alpha tocoperol) used in many formulas. This may be especially important for people at risk for recurrent infections. See Malkowska-Zwierz, . . . .

SUMM The immune enhancing effect of **vitamin E** may be related to decreased lipid peroxidation products which occurs with **vitamin E** supplementation. See Meydani, S. N., Am. J. Clin. Nutr. 53(4):984, April 1991. The mineral selenium is crucial to the body's natural antioxidant enzyme system and works synergistically with **vitamin E**, both contributing to the maintenance of total immune system defenses. See Dhur, A., et al Comp. Biochem. Physiol. 96C Physio.. . .

SUMM . . . deficiency is seldom seen in young and middle age adults, it occurs in the elderly, especially those in nursing homes. **Vitamin C** deficiency can result in oxidative changes when it is 50% of baseline values in plasma leukocytes. See Jacon, R. A.. . . Kramer, T. R., Granulocyte Response in Children Supplemented With Vitamin A and Zinc. AJCN 58(4):566-70, Oct. 1993 Smokers require more **vitamin C** to maintain adequate plasma levels of this important antioxidant vitamin. The Modular 2 formulation provides 5 times the RDA for **vitamin C**, with higher amounts in the Stress formula to compensate for the added losses due to smoking.

SUMM . . . and the micronutrients vitamins A, C, E, B1, B2, zinc and iron, all contribute to the healing process. For example, **vitamin C** is required for collagen synthesis, vitamin A for tissue epithelialization, and zinc for cellular mitosis and proliferation and as a. . . B. Effects of nutritional status on wound healing. J. Vasc. Nursing 11 (1): 12-8 Mar. 1993. Low serum concentration of **vitamin C** was considered the key contributing factor in bed sore development in elderly patients who sustained femoral neck fracture. See Goode, H. F., Burns, E. Walker B E. **Vitamin C** Depletion and Pressure Sores in Elderly Patients With Femoral Neck Fracture, BMJ 305(6859):925-7, Oct. 17, 1992 . In patients with serious blunt trauma, neutrophil locomotor dysfunction is partly the result of auto-oxidation, evidenced by low serum and cellular **vitamin C** and E. In patients receiving antioxidants, neutrophil function was shown to be significantly improved. See Maderazo, E. G. Woronick C. . . trial of replacement antioxidant vitamin therapy for neutrophil locomotory dysfunction in blunt trauma.

J. of Trauma, 31(8):1142-50, Aug. 1991, Verix Vitamin E Information Service. Post-operative oral multivitamin supplementation in a study of 140 patients also was found to be useful in correcting. . . of Obesity, 15(10):661-7, Oct. 1991 Burned patients exhibit elevated levels of plasma lipid peroxidation products and reduced levels of serum **vitamin E** and total sulphydryl group concentration. Increased oxygen free radical activity and activation of white blood cells and macrophages was also. . . Traber D L Gasser H. Redl H. Schlag G. Herndon D N. Free radical activity and loss of plasma antioxidants, **Vitamin E** and sulphydryl groups in patients with burns: the 1993 Moyer Award. J. of Burn Care & Rehab. 14(6):602-9, 1993 Nov.-Dec.

SUMM . . . maintains higher levels of antioxidants in the tissues than ordinary vitamins taken once daily since water soluble antioxidants such as **vitamin C** and the B vitamins are utilized and need to be replaced throughout the day.

SUMM Specific antioxidant micronutrients such as **vitamins E**, C, beta-carotene, selenium, copper, manganese, magnesium, folic acid, vitamin B6, and vitamin B12 and other nutritional compounds formulated into the. . .

SUMM . . . induce risks. It is known that aspirin taken with omega-3 fatty acid supplementation in humans prolongs bleeding time and that **vitamin E** with aspirin reduces the concentration of **vitamin E** needed to inhibit platelet aggregation. See Violi, et al, Atherosclerosis 82:247-252, 1990.

SUMM It has been shown in animal models that taking **ascorbic acid** or acetylsalicylic acid alone did not stimulate or inhibit the production of interleukin-6 whereas a combination of both substances caused a significant stimulation. See Hockertz, S., Schettler, T.

Effect of acetylsalicylic acid, and **vitamin C**, and ibuprofen on the the macrophage system. Arzneimittel Hel-Forschung. 42:1062-8, August 1992.

SUMM The bioflavonoid **quercetin** scavenges the superoxide anion radical directly and inhibits cyclooxygenase as does aspirin. See Chung-Kuo, Yao Li Hsueh, Pao Acta pharmacologica. . .

SUMM . . . gastrointestinal, cerebrovascular or renal bleeding can occur from all dose levels of aspirin intake. The formulation avoids high levels of **vitamin E** and fish oil found in some vitamin reparations that may produce excessive bleeding when combined with aspirin.

SUMM . . . Module 4 are unique as they contain original dosage levels of nutrients that provide definitive health advantages individually or synergistically. **Vitamin C** protects the duodenum against aspirin-induced duodenal injury and bleeding. See McAlindon, M. E. et al Effect of allopurinol, sulphasolazine, and **vitamin C** on aspirin induced gastroduodenal injury in human volunteers, Gut, 38(4), 1996, p.518-24. Antioxidant vitamins such a C, and E, plus. . .

SUMM . . . lymphocyte functions by n-6 and n-3 polyinostriected fatty acids and acetylsalicylic acid. Ann Nutri. Metab. 1993, 37 (3) p. 146-59. **Vitamin E** is required for the oxidation of long chain polyunsaturated fatty acids at the mitochondrial membranes, such as eicosanoids, the synthesis. . .

DETD . . . low dose aspirin may occur by the action of another micronutrient in the modular formulations, such as vitamins B6, or **vitamin C**, or or **vitamin E** by the special way the formula is taken in the AM and PM; or in the addition of the stress. . .

DETD . . . on a daily basis. The formulations contain no vitamin K to prevent interference with aspirin's effects. The formulas may contain

vitamin C to help heal aspirin-induced gastric irritation. The antioxidant lycopene has been added to protect the antioxidant function of vitamin C and other antioxidants. The formulas contain no citrates, acetates or phosphates which can react with aspirin to produce potentially toxic. . .

DETD The formulas avoid excessive beta carotene which may negatively affect the activity of alpha-tocopherol (vitamin E). This effect has been taken into account in the formulations by providing appropriate doses. The formulas utilize water soluble vitamin

E which do not require dietary lipids for absorption. The inclusion of coenzyme Q-10, as a facilitator of vitamin E, and a ubiquitous intracellular antioxidant, which has recently been found to preserve myocardial function, is a useful and unique advantage. . . of excess copper in the formula helps prevent the negative effects of copper which can oppose the antioxidant action of vitamin E. The formulas may also contain capsicum or chili pepper to counteract aspirin's negative effects on prostaglandins. Alternately the aspirin or. . .

DETD . . . about 50.0 to about 10,000 mcg

Lutein about 50.0 to about 5,000 mcg

Zeaxanthin about 5.0 to about 500 mcg

**Vitamin C** about 20.0 to about 1,000 mg

Vitamin D about 0.0 to about 400 IU

**Vitamin E** about 5.0 to about 2,000 mg

Grape Seed Extract about 0.0 to about 300 mg

Green Tea Extract about 0.0. . . about 500 mg

Hawthorne Berry about 0.0 to about 500 mg

Extract\*

L-Carnitine about 0.0 to about 700 mg

**Alpha Lipoic Acid** about 0.0 to about 750 mg

Taurine about 15.0 to about 1,000 mg

Quercitin about 0.0 to about 500 mg

DETD The formulas may contain other synergistic dietary or nutritional compounds such as garlic, bioflavonoids, **quercetin**, capsicum, boron, melatonin & DHEA. The formulas may also contain glycerol, sorbitol, sucrose, magnesium stearate and other excipients and binders.. . .

DETD . . . 100 mcg -- 100 mcg 200 mcg Vitamin B12 (Cobalamin) 6 mcg 3 mcg 6 mcg 3 mcg 6 mcg **Vitamin C\*** (Buffered Calcium Ascorbate, 150 mg 150 mg 600 mg 100 mg 200 mg **Ascorbic Acid** and Ascorbyl Palmitate) **Vitamin D3** (Cholecalciferol) 300 IU 100 IU -- **Vitamin E** (d-alpha Tocopheryl Succinate) 60 IU 40 IU 30 IU 100 IU 200 IU

Calcium (Carbonate, Ascorbate) 225 mg 275 mg. . . mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg Green Tea Extract 25 mg 50 mg **Quercetin** 50 mg 200 mg Hawthorne Berries\* (Flavones) 2 mg 5 mg **Alpha Lipoic Acid** 30 mg 100 mg

DETD . . . 100 mcg -- 100 mcg 200 mcg Vitamin B12 (Cobalamin) 6 mcg 3 mcg 6 mcg 3 mcg 6 mcg **Vitamin C\*** (Buffered Calcium Ascorbate, 150 mg 100 mg 600 mg 100 mg 200 mg **Ascorbic Acid** and Ascorbyl Palmitate) **Vitamin D3** (Cholecalciferol) 300 IU 100 IU -- **Vitamin E** (d-alpha Tocopheryl Succinate) 70 IU 30 IU 30 IU 100 IU 200 IU

Calcium (Carbonate, Ascorbate) 200 mg 345 mg. . . mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg Green Tea Extract 25 mg 50 mg **Quercetin** 50 mg 200 mg Hawthorne Berries\* (Flavones) 2 mg 5 mg **Alpha Lipoic Acid** 30 mg 100 mg

CLM What is claimed is:

. . . about 50.0 to about 10,000 mcg

Lutein about 50.0 to about 5,000 mcg

Zeaxanthin about 5.0 to about 500 mcg  
**Vitamin C** about 20.0 to about 1,000 mg  
Vitamin D about 0.0 to about 400 IU  
**Vitamin E** about 5.0 to about 2,000 mg  
Grape Seed Extract about 0.0 to about 300 mg  
Green Tea Extract about 0.0. . . about 500 mg  
Hawthorne Berry about 0.0 to about 500 mg  
Extract\*  
L-Carnitine about 0.0 to about 700 mg  
**Alpha Lipoic Acid** about 0.0 to about 750 mg  
Taurine about 15.0 to about 1,000 mg  
Quercetin about 0.0 to about 500 mg, . . .  
. . . mcg of Lutein; from about 5.0 to about 500 mcg of Zeaxanthin; from about 20.0 to about 1,000 mg of **Vitamin C**; from about 0.0 to about 400 IU of Vitamin D; from about 5.0 to about 2,000 mg  
of **Vitamin E**; from about 0.0 to about 300 mg of Grape Seed Extract; from about 0.0 to about 500 mg of Green. . .  
Hawthorne Berry Extract; from about 0.0 about 700 mg of L-Carnitine; from about 0.0 to about 750 mg of **Alpha Lipoic Acid**; from about 15.0 to about 1,000 mg of Taurine; from about 0.0 to about 500 mg of **Quercetin**; and from about 0.0 to about 500 mg of odorless Garlic.

150 mcg of Biotin, about 300 mcg of Folic Acid, about 6 mcg of Vitamin B.sub.12, about 150 mg of **Vitamin C**, about 300 IU of Vitamin D.sub.3, from about 60 to about 70 IU of **Vitamin E**, from about 200 to about 225 mg of Calcium, about 80 mcg of Chromium, about 0.5 mg of Copper, from. . . about 100 mcg of Folic Acid, about 3 mcg of Vitamin B.sub.12, from about 100 to about 150 mg of **Vitamin C**, about 100 IU of Vitamin D.sub.3, from about 30 to about 40 IU of **Vitamin E**, from about 275 to about 345 mg of Calcium, about 20 mcg of Chromium, about 0.5 mg of Copper, from. . .  
15 mg of Vitamin B.sub.6, about 300 mcg of Biotin, about 6 mcg of Vitamin B.sub.12, about 600 mg of **Vitamin C**, about 30 IU of **Vitamin E**, about 450 mg of Calcium, about 70 mcg of Chromium, about 0.5 mg of Copper, about 3 mg of Iron, . . .  
. . . Folic Acid, from about 3 to about 6 mcg of Vitamin B.sub.12, from about 100 to about 200 mg of **Vitamin C**, from about 100 to about 200 IU of **Vitamin E**, from about 15 to about 25 mcg of Chromium, from about 25 to about 50 mg of Magnesium, from about. . . Extract, from about 25 to about 50 mg of Green Tea Extract, from about 50 to about 200 mg of **Quercetin**, from about 2 to about 5 mg of Hawthorne Berries, and from about 30 to about 100 mg of **Alpha Lipoic Acid**.

AN 1999:136718 USPATFULL  
TI Modular system of dietary supplement compositions for optimizing health benefits and methods  
IN Riley, Patricia A., Sunrise, FL, United States  
PA Medical Doctors' Research Institute, Inc., Sunrise, FL, United States (U.S. corporation)  
PI US 5976568 19991102 <--  
AI US 1997-803587 19970221 (8)  
DT Utility  
EXNAM Primary Examiner: Dees, Jose' G.; Assistant Examiner: Shelborne, Kathryne E.  
LREP Holland & Knight LLP  
CLMN Number of Claims: 5  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 17021

L8 ANSWER 4 OF 25 USPATFULL

AB The present invention relates to a combination preparation containing electrolyte-enriched plant embryos and essential, semi-essential and/or non-essential micro-nutrients, in particular for the treatment of immune-suppressed persons.

PI US 5973224 19991026 <--

SUMM vitamins and coenzymes, preferably coenzyme Q10, pyridoxole, riboflavin, folic acid, biotin, vitamin K, vitamin B 12, vitamin D3, carnitine, betain and/or vitamin C,

SUMM other micro-nutrients, preferably quercetin, .alpha.-lipoic acid, glutathione, aneurin, inositol, orotic acid, inosine and/or p-amino benzoic acid,

SUMM . . . mg vitamin B6, 150 mg Niacin, 30 mg pantothenic acid, 0.02 mg B 12, 1.5 mg folic acid, 1700 mg vitamin C, 0.01 mg vitamin D3, 180 mg vitamin E, 0.04 mg vitamin K, 0.3 mg biotin, 1,400 mg potassium, 700 mg calcium, 550 mg magnesium, 29 mg iron, 34. . . mg chromium, 0.2 mg molybdenum, 450 mg sodium, 440 mg chloride, 770 mg phosphorus, 120 mg coenzyme Q10, 350 mg .alpha.-lipoic acid, 3 mg lithium, 3 mg strontium, 136 mg flavonoides, 700 mg L-carnitine, 250 mg glutathione, very favorable, i.e. effective, results.

DETD . . . N-acetyl-cysteine, 330 mg of bioflavonoides, 330 mg of anthocyanes, 150 mg of GLA, 100 mg of L-glutamine, 0.01 mg of vitamin D3, 0.01 mg of vitamin B12, 0.07 mg of vitamin K, 0.2 mg of iodide, 1.8 mg of fluoride, 0.2 mg. . .

CLM What is claimed is:

. . . coenzymes are selected from the group consisting of coenzyme Q10, pyridoxole, riboflavin, folic acid, biotin, vitamin K, vitamin B 12, vitamin D3, carnitine, betain, vitamin C, said essential and non-essential amino acids are selected from the group consisting of N-acetyl cysteine, taurine, L-glutamine, isoleucine, leucine, lysine, . . .

AN 1999:133105 USPATFULL|

TI Dietetical combination preparations|

IN Fuchs, Norbert, 135 Bruckdorf, A-5571, Mariapfarr, Austria  
Zelch, Norbert, 11a Wasserfeldstrasse, A-5020, Salzburg, Austria  
Koessler, Peter, 219 Bruckdorf, A-5571, Mariapfarr, Austria  
Loidl, Rupert, Tischlerhaeusl, A-5571, Mariapfarr, Austria

PI US 5973224 19991026 <--

AI US 1996-648661 19960516 (8)

PRAI AT 1996-607 19960403

DT Utility|

EXNAM Primary Examiner: Achutamurthy, Ponnathapura; Assistant Examiner: Wessendorf, T.|

LREP Arnold White & Durkee|

CLMN Number of Claims: 9|

ECL Exemplary Claim: 1|

DRWN No Drawings

LN.CNT 463|

L8 ANSWER 5 OF 25 USPATFULL

AB This disclosure relates to a derivative of L-ascorbic acid which is stable, easily incorporated into cosmetically acceptable vehicles and enzymatically bioreversible in the skin to free ascorbic acid and a safe alkanol component. The L-ascorbic acid derivative includes cholesterol. The L-ascorbic acid derivative is a compound selected from the group consisting of 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol, isomers thereof and salts thereof.

PI US 5951990 19990914 <--

AB This disclosure relates to a derivative of L-ascorbic acid which is stable, easily incorporated into cosmetically acceptable vehicles and enzymatically bioreversible in the skin to free

ascorbic acid and a safe alkanol component. The L-ascorbic acid derivative includes cholesterol. The L-ascorbic acid derivative is a compound selected from the group consisting of 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol, isomers thereof and salts thereof.

SUMM The present invention relates to the synthesis and use of a novel derivative of L-ascorbic acid. This derivative of L-ascorbic acid includes cholesterol. The resultant product is stable, easily incorporated into cosmetically acceptable vehicles and enzymatically bioreversible.

SUMM The use of L-ascorbic acid as an antioxidant in food preparations is known. For example, Steinhart, Pro- and Antioxidative Effect of Ascorbic Acid on L-Tryptophan in the Fe<sup>3+</sup>/Ascorbic Acid/O<sub>2</sub>, J. Agric. Food Chem., Vol. 41, pages 2275-2277 (1993) describes the use of L-ascorbic acid as an antioxidant that functions in food to remove free radicals and undergoing rapid oxidation.

SUMM Similarly, free L-ascorbic acid in topical preparations demonstrates poor stability and tends to break down due to partially oxidative and non-oxidative degradation. The degraded ascorbic acid loses activity and the resultant product loses aesthetic appeal since it exhibits a cosmetically undesired brown color.

SUMM While cholesterol is considered unhealthy especially when ingested, the benefits of cholesterol, necessitated with L-ascorbic acid, for skin barrier repair are known. For example, Menon, Structural Basis for the Barrier Abnormality Following Inhabitutions of HMG CoA. . .

SUMM Presently, mechanical mixing of L-ascorbic acid and cholesterol results in an unstable product due to the instability of L-ascorbic acid. For example, U.S. Pat. No. 4,939,128 to Kato is directed to the use of phosphoric acid esters of ascorbic acid for the treatment of diseases, not for cosmetics, topical dermatological or skin uses, and teaches that certain phosphoric acid esters of ascorbic acid display improved oxygen scavenging properties. One of the phosphoric acid esters in the patent is substituted with a cholestanyl group. The conspicuous absence of cholesterol and the specific mention of a cholestryly group recognizes that conjugates of L-ascorbic acid and cholesterol were then not practical or desired.

SUMM Attempts have been made to conjugate ascorbic acid with a glycyrrhetic group as described in European Application No. 92104149.7; and with a tocopheryl group as indicated by U.S. . . .

SUMM . . . of the New Active Commercial Product, IFSCC, Yokohama, Vol. B206, pages 823-864 (1993) describes the use of tocopheryl coupled to L-ascorbic acid. The coupled tocopheryl is an antioxidant preservative for the ascorbyl group, but the use of the ascorbyl-tocopheryl as a skin. . . .

SUMM Heretofore, there has been needed a stable product having cholesterol coupled to L-ascorbic acid, which product retained full functional activity even after decoupling by naturally occurring acidic phosphatases in the skin. This product would provide the beneficial properties of L-ascorbic acid, including increased collagen production and skin-lightening, combined with the benefits of released cholesterol, namely improved elasticity, resistance, tone and moisture. . . . of the skin. Accordingly, there has been needed a method for covalently and bioreversibly effecting the coupling of cholesterol to L-ascorbic acid.

SUMM It is an object of the present invention such a stable composition that is a novel derivative of L-ascorbic acid that includes cholesterol.

SUMM It is another object of the present invention to provide to provide such

a stable composition of cholesterol coupled to L-**ascorbic acid** for use in cosmetic products.

SUMM . . . yet a further object of the present invention is to provide a method for covalently and bioreversibly coupling cholesterol to L-**ascorbic acid** for stabilization of the resulting molecule.

SUMM To accomplish the forgoing objects and advantages, the present invention, in brief summary, is a derivative of L-**ascorbic acid** that includes cholesterol. Such derivatives are, for example, 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol or isomers thereof and their salts thereof.

DETD The present invention includes a novel derivative of L-**ascorbic acid**. The derivative is formed by a coupling of L-**ascorbic acid** and cholesterol. The novel derivative, that can be easily included in a suitable topical vehicle, is selected from the group. . .

DETD The L-**ascorbic acid** is covalently bounded to the cholesterol by phosphoryl or phosphates so that the L-**ascorbic acid** derivative set forth above is also called ascorbyl-phosphoryl-cholesterol.

DETD In the ascorbyl-phosphoryl-cholesterol compounds of the present invention, the conjugated **ascorbic acid** becomes resistant to degradation. The cholesteryl group serves as a carrier moiety and facilitates delivery of polar **ascorbic acid** through the non-polar outermost protective layer of skin (i.e., the stratum corneum) and increases the bioavailability of the **ascorbic acid** in the topical application.

DETD Natural enzymes, such as phosphatases present in the skin, gradually cleave the phosphoryl or phosphate linkage between cholesterol and **ascorbic acid**, resulting in sustained release of free L-**ascorbic acid** and cholesterol into the stratum corneum. The released cholesterol is a natural substrate for skin and supplements that otherwise produced. . .

DETD . . . topical formula may comprise from about 0.0001 to about 100, with all ranges set forth in weight percent, of the L-**ascorbic acid** derivative. In a preferred embodiment, about 0.05 to about 50 weight percent of the L-**ascorbic acid** derivative is in a cosmetically acceptable vehicle. In a more preferred embodiment, about 0.10 to about 20 weight percent of the L-**ascorbic acid** derivative is combined with a cosmetically acceptable vehicle, and in an even more preferred embodiment about 1.0 to about 10 weight percent. Salts of the L-**ascorbic acid** derivative, namely ammonium, calcium, lithium, potassium or sodium can be incorporated with the L-**ascorbic** derivative into a cosmetically acceptable vehicle. A salt with an organic amine, such as ethanolamine, may also be used in combination with the L-**ascorbic acid** derivative.

DETD A first or more basic lotion comprises about 0.10 to about 20.0 weight percent of the L-**ascorbic acid** derivative, and the remainder is or includes water. Most preferably, the L-**ascorbic acid** derivative is 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol (Formula I) or 3'-(L-ascorbyl-3-o-phosphoryl)-cholesterol (Formula II) and, preferably, the L-**ascorbic acid** derivative is isomers and/or salts thereof. A second lotion has about 0.10 to about 20.0 weight percent L-**ascorbic acid** derivative, about 0.001 to about 1.5 weight percent thickener or thickening agent, and the remainder is or includes water. The. . .

DETD Examples of thickening agents suitable for use with the L-**ascorbic acid** derivative include xanthan gum, xanthan gum brine tolerant, hydroxypropyl cellulose, hydroxyethyl cellulose, carbopol and gum acacia, polyacrylamide isoparaffin emulsion (available. . .

DETD A third lotion has, besides about 0.10 to about 20.0 weight percent L-**ascorbic acid** derivative, about 0.50 to about 1.40

weight percent of a thickening agent, about 0.50 to about 6.0 weight percent of. . .

DETD A second cosmetic vehicle, a cream, comprises about 0.10 to about 20.0 weight percent of the L-ascorbic acid derivative, about 0.1 to about 1.20 weight percent of a thickening agent; about 0.1 to about 15 weight percent of. . .

DETD . . . prepared without applying high pressure. Microfluidization permits the preparation of elegant stable creams and lotions containing effective amounts of the L-ascorbic acid derivative without the use of traditional emulsifiers and surfactants.

DETD With respect to the L-ascorbic acid derivative in a gel vehicle, a first or preferred gel has about 0.10 to about 20 weight percent L-ascorbic acid derivative, about 0.30 to about 2.0 weight percent thickening agent, and the remainder includes water. A second or less preferred gel has about 0.10 to about 20.0 weight percent L-ascorbic acid derivative; about 2.0 to about 6.0 weight percent of an emollient/humectant, preferably propylene glycol; about 0.4 to about 1.5 weight. . .

DETD . . . in the above lotion, cream and gel formulas is glycerin and an emollient/humectant is propylene glycol. Besides such emollients, the

L- ascorbic acid derivative or the lotion, cream or gel formulas can also be combined with most other conventional emollients, such as mineral. . .

DETD The L-ascorbic acid derivative in an amount about 0.05 to about 10 weight percent, and more preferably about 0.05 to about 5 weight. . .

DETD The L-ascorbic acid derivative in an amount about 0.001 to about 25 weight percent can also be used with organic and inorganic sunscreens, . . .

DETD About 0.001 to about 10 weight percent, and more preferably about 0.001 to 5 weight percent of the L-ascorbic acid derivative can be co-formulated with (a) retinoids, (b) hormonal compounds, (c) alpha-hydroxyacids or polyhydroxy alpha-hydroxy acids, or (d) alpha-keto acids.

DETD The L-ascorbic acid derivative can be used for additional benefits in topical formulations that include the following ingredients: vitamins, enzyme co-actors such as vitamin B6, vitamin B12, vitamin D3, 1,25-dihydroxy vitamin D3, vitamin B1, riboflavin, vitamin K, vitamin E, tocotrienols and their derivatives, nicotinic acid and its esters, pantothenic acid and its esters, panthenol, folic acid and its derivatives, . . . of which tolnaftate, haloprogin and miconazole are most preferred. In formulas that include one or both of the preferred, the L-ascorbic acid derivative is present in an amount from about 0.001 to about 10 and, more preferably, about 0.001 to about 5. . .

DETD About 0.001 to about 20 weight percent of the L-ascorbic acid derivative can be used with one or more of:

DETD (6) the L-ascorbic acid derivative can be used with topical anti-inflammatory agents that can reduce inflammation. These agents are at a concentration from about. . . or down depending upon the potency of the utilized agents. Examples of steroid anti-inflammatories that can be used with the L-ascorbic acid derivative include hydrocortisone, hydroxytriamcilon, alpha-methyl dexamethasone, dexamethasone phosphate, beclamethasone dipropionate, hydrocortisone valerate, hydrocortisone cyclopentylpropionate, prednisolone, prednisone, and mixtures thereof, with. . .

DETD About 0.001 to about 20 weight percent of the L-ascorbic acid derivative can be used in formulas that contain anti-oxidants with phenolic hydroxy functions, such as gallic acid

derivatives (e.g. propyl gallate), bio-flavonoids (e.g. **quercetin**, **rutin**, daidzein, genistein), ferrulic acid derivatives (e.g. ethyl ferrulate, sodium ferrulate), 6-hydroxy-2,5,7,tetra-methylchroman-2-carboxylic acid. The compositions may also contain effective concentrations of water soluble anti-oxidants such as, for example, uric acid, reductic acid, tannic acid, rosmarinic acid and **catechins**. Also the **L-ascorbic acid** derivative can be co-formulated with nitric oxide synthase inhibitors to reduce skin redness, vasodilation and inflammatory reactions, especially in response. . .

DETD . . . contain are those that have one or more thiol functions (--SH) in either reduced or non-reduced form such as glutathione, **lipoic acid**, thioglycolic acid and other sulphhydryl compounds. The levels of sulphhydryl anti-oxidants should not exceed 0.5% for cosmetic uses of the. . .

DETD The **L-ascorbic acid** derivative may be used with about 0.025% to about 5%, preferably about 0.5 to about 3 weight percent, and most. . .

DETD About 0.001 to about 50 weight percent of the **L-ascorbic acid** derivative can also be used in compositions that contain insect repellents such as aliphatic, cyclic or aromatic amides, citronella oil,. . .

DETD The about 0.001 to about 50 weight percent **L-ascorbic acid** derivative is also suitable for topical compositions that contain skin cooling compounds such as, for example, menthol, menthyl glycerol, asymmetrical. . .

DETD The **L-ascorbic acid** derivative can be used with other cosmetic and pharmaceutical actives and exponents, such as, for example, antifungals, antiallergenic agents, depigmenting. . . agents, anesthetics, surfactants, moisturizers, exfoliants, stabilizers, antiseptics, lubricants, chelating agents and skin penetration enhancers. When used with these ingredients, the **L-ascorbic acid** derivative may provide additional dermatological and/or cosmetic benefits.

DETD The **L-ascorbic acid** derivative can also be formulated in the form of micro-emulsions. The micro-emulsion system would typically contain an effective amount of the **L-ascorbic acid** derivative, up to 18% of a hydrocarbon, up to 40% of an oil, up to 25% of a fatty alcohol,. . .

DETD The **L-ascorbic acid** derivative is suitable and convenient for use in topical products formulated in the form of oil-in-water or water-in-oil emulsions, ointments,. . . as multiphase emulsion compositions, such as water-in-oil-in-water type as disclosed in U.S. Pat. No. 4,254,105, incorporated herein by reference. The **L-ascorbic acid** derivative can also be formulated as triple emulsions of the oil-in-water-silicone fluid type as disclosed in U.S. Pat. No. 4,960,764. . .

DETD The **L-ascorbic acid** derivative can also be made as a liposomal formulation, for example, according to the methods described in Mezei, J. Pharmaceut. Pharmacol., vol. 34, pp. 473-474 (1982) or modification thereof. In such compositions, droplets of the **L-ascorbic acid** derivative can be entrapped inside the liposomal vesicles and then incorporated into the final formula with the shell of the. . .

DETD The **L-ascorbic acid** derivative can also be entrapped in polymeric vesicles with a shell consisting of a suitable polymeric material, such as gelatin,. . .

DETD When about 0.001 to about 20 of **L-ascorbic acid**

derivative is used with certain chelating agents, the utility and mildness of the composition can also be enhanced. The chelating. . .

DETD The L-ascorbic acid derivative has been unexpectedly and surprisingly found to be useful as active agent in topical preparations for treating signs of. . .

DETD The L-ascorbic acid derivative also enhances protection against UV provided by known sunscreen formulations.

DETD The present invention also relates to a method for coupling a molecule of L-ascorbic acid to a molecule of cholesterol. The coupling preferably occurs through a bioreversible phosphate linkage at position 2 or 3 on. . .

DETD . . . absorption at 1019 wavelengths, with no hydroxyl absorption. Cholesteryl phosphorodichloride was subsequently reacted for 3 hours at room temperature with 5,6-isopropylidene-L-ascorbic acid in tetrahydrofuran containing 1.0 equivalent of triethylamine. This reaction yielded a mixture of cholesteryl 5,6isopropylidene-2-phosphorochloride L-ascorbic acid and its isomer cholesteryl 5,6-isopropylidene-3-phosphorochloride L-ascorbic acid.

DETD This novel method permits covalent and bioreversible coupling of cholesterol with L-ascorbic acid resulting in the stabilization of ascorbic acid, and increased bioavailability for ascorbic acid and cholesterol.

DETD . . . present invention are generally synthesized by reacting cholesterol with a halogenophosphorelating agent, (b) coupling the resulting product with 5,6-hydroxyl protected L-ascorbic acid, (c) hydrolyzing the product with water, (d) stripping the protective group with an acidic resin and (e) purifying the product. . .

DETD . . . cooled in an ice/methanol bath (-10 degrees C.). To the cooled mixture was added 216 mg (1 mmole) of Sigma 5,6-isopropylidene-L-ascorbic acid, 15 ml of dry THF and 0.14 ml (101 mg, 1 mmole) of dry (KOH) triethylamine. After addition, the mixture. . .

DETD Conjugation with cholesterol converts the polar ascorbic acid to a more non-polar lipophilic ascorbyl group that is readily absorbed through the stratum corneum. Once past the stratum corneum, the absorbed compound is able to effect underlying fibroblasts.

The benefits of bioreversed ascorbic acid and cholesterol have been previously explained. Surprisingly, the conjugated compound itself stimulates collagen synthesis which enhances the integrity, elasticity and. . .

AN 1999:109980 USPATFULL  
TI Ascorbyl-phosphoryl-cholesterol  
IN Ptchelintsev, Dmitri S., Mahwah, NJ, United States  
PA Avon Products, Inc., New York, NY, United States (U.S. corporation)  
PI US 5951990 19990914 <--  
AI US 1997-853271 19970509 (8)  
RLI Continuation-in-part of Ser. No. US 1995-440765, filed on 15 May 1995, now abandoned  
DT Utility  
EXNAM Primary Examiner: Kishore, Gollamudi S.  
LREP Ohlandt, Greeley, Ruggiero & Perle, L.L.P.  
CLMN Number of Claims: 39  
ECL Exemplary Claim: 1  
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)  
LN.CNT 876  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 6 OF 25 USPATFULL

AB The present invention pertains generally to the field of Public Health, including the prevention and treatment of coronary heart disease which is currently the first cause of death in the American population. More specifically, the present invention concerns a total modular system of

multivitamin and mineral supplementation composed of 7 distinct modules for improving public health by insuring adequate intake of micronutrients needed for disease prevention and protection against nutritional losses and deficiencies due to, for example, lifestyle factors and common inadequate dietary patterns. A module, as used herein

throughout, is defined as a separate and distinct combination of vitamin-mineral and other health promoting compounds which are directed to specific target populations. The formulations of the present invention which, when combined in one capsule or tablet or as separate modules, exert a joint and enhancing effect on the major pathogenetic factors involved in the atherosclerotic process. Moreover, certain modular formulations of the present invention incorporate both antioxidants and acetylsalicylic acid (aspirin) as a single preventive modality. Such a combination of antioxidants and aspirin is believed to act to prevent oxidation of low density lipoproteins within coronary arterial walls and to cause platelet deagglutination thereby inhibiting thrombus formation. The benefit of preventing these two major processes is believed to reduce the risk of coronary heart disease.

PI US 5948443 19990907

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SUMM . . . specific vitamins and minerals. The importance of these findings relate to the prevention of micronutrient deficiency diseases such as scurvy (**vitamin C** deficiency), pellagra (niacin deficiency), beri-beri (vitamin B1 deficiency), iron deficiency anemia and other vitamin and mineral deficiency states. The effect. . .

SUMM . . . are designed without consideration for micronutrient interactions. Examples of the significance of these reactions is the required presence of optimal **vitamin C** for the absorption of iron, the presence of Vitamin D for the absorption of calcium, and the mutually protective effects. . .

SUMM . . . it was discovered that the oxidation of LDL could be prevented significantly by micronutrient antioxidants such as beta carotene and **vitamin E**.

SUMM . . . aging process. Animal and human studies gave further impetus to these findings when it was shown that specific micronutrients, notably **vitamin E**, substantially blocked the induction of free radicals. Later, it was documented that lipid peroxidation formed free radicals with release of. . .

SUMM . . . in humans by significantly reducing diene formation. Mackness, M. I., et al. (1993) Biochem. J. 294 (Part 3): 829-834. Dietary **vitamin E** levels in the serum were studied in relation to in vitro oxidation of LDL and VLDL, and were found to. . .

SUMM . . . increase requirements for nutrients. For example, exercise increases the need for vitamin B2 and chromium. Smoking increases the need for **vitamin C**. Niacin influences cholesterol metabolism. Chromium potentiates insulin function which affects blood sugar levels.

SUMM . . . environmental factors which contribute to the aging process including the effects of solar radiation, pollution and other toxicants.

For example, **vitamin C** maintains healthy connective tissue, and **vitamin E**, and the carotenoids, especially lycopene, protect against ultraviolet radiation.

SUMM . . . diets can deplete minerals such as calcium, zinc and iron which

are provided in the formula. Increasing intake of dietary **Vitamin E** and other polyunsaturates increases the need for antioxidants, these micronutrients are provided for in the formulation.

SUMM . . . the use of aspirin without interference by excessive dosages of

nutrients which may contribute to decreased blood clotting, such as **vitamin E**. In addition, the Modular 1 composition contains appropriate levels of folic acid, vitamin B12 and vitamin B6

SUMM which reduce homocysteine. . . .  
SUMM . . . dosage of one nutrient, may affect the absorption or utilization of another vitamin or mineral. For example, one function of **vitamin C** is to facilitate iron absorption, Fairbanks, V. S., Iron in medicine and nutrition, in Shils, E. M., et al Modern.

SUMM . . . the immune system. See Chandra, R. K Excessive Intake of Zinc Impairs Immune Responses, JAMA 1984; 252:1443-6. High levels of **vitamin E** and D decrease the activation of interleukin 2; thus, the formulations of the present invention do not use megadoses of. . . .

SUMM . . . must be adequate to assure proper immune functions. Many persons, especially the elderly are at risk for low intakes of **vitamins C, E, B6, and zinc** in their diet. The stress Module 2 increases the levels supplied of these nutrients.

SUMM Modules 1, 2 and 3 provide a natural form of **vitamin E** (d-alpha tocopherol) which is 36% more active than a less expensive synthetic **vitamin E** (dl-alpha tocopherol) used in many formulas. This may be especially important for people at risk for recurrent infections. See Malkowska-Zwierz, . . . .

SUMM The immune enhancing effect of **vitamin E** may be related to decreased lipid peroxidation products which occurs with **vitamin E** supplementation. See Meydani, S. N., Am J. Clin. Nutr. 53(4): 984, April 1991. The mineral selenium is crucial to the body's natural antioxidant enzyme system and works synergistically with **vitamin E**, both contributing to the maintenance of total immune system defenses. See Dhur, A., et al Comp. Biochem Physiol. 96C (2):. . . .

SUMM . . . deficiency is seldom seen in young and middle age adults, it occurs in the elderly, specially those in nursing homes. **Vitamin C** deficiency can result in oxidative changes when it is 50% of baseline values in plasma leukocytes. See Jacob, R.A. et. . . . R, et al. Lymphocyte Responsiveness of Children Supplemented With Vitamin A and Zinc. AJCN 58(4):566-70, October 1993. Smokers require more **vitamin C** to maintain adequate plasma levels of this important antioxidant vitamin. The Modular 2 formulation provides 5 times the RDA for **vitamin C**, with higher amounts in the Stress formula to compensate for the added loses due to smoking.

SUMM . . . and the micronutrients vitamins A, C, E, B1, B2, zinc and iron, all contribute to the healing process. For example, **vitamin C** is required for collagen synthesis, vitamin A for tissue epithelization, and zinc for cellular mitosis and proliferation and as a. . . . B. Effects of nutritional status on wound healing. J. Vasc. Nursing 11 (1): 12-8 March 1993. Low serum concentration of **vitamin C** was considered the key contributing factor in bed sore development in elderly patients who sustained femoral neck fracture. See Goode, H. F., Burns, E. Walker BE. **Vitamin C** Depletion and Pressure Sores in Elderly Patients With Femoral Neck Fracture, BMJ 305(6859):925-7, Oct. 17, 1992. In patients with serious blunt trauma, neutropil locomotor dysfunction is partly the result of auto-oxidation, evidenced by low serum and cellular **vitamin C** and E. In patients receiving antioxidants, neutrophil function was shown to be significantly improved. See Maderazo, E. G. et al.. . . . trial of replacement antioxidant vitamin therapy for neutrophil locomotory dysfunction in blunt trauma. J. of Trauma, 31(8):1142-50, August 1991, Verix **Vitamin E** Information Service. Post-operative oral multivitamin supplementation in a study of 140 patients also was found to be useful in correcting. . . .

of Obesity, 15(10):661-7, October 1991. Burned patients exhibit elevated levels of plasma lipid peroxidation products and reduced levels of serum

**vitamin E and total sulfhydryl group concentration.**

Increased oxygen free radical activity and activation of white blood cells and macrophages was also. . . Cox CS. Traber DL Gasser H. Redl H. Schlag G. Herndon DN. Free radical activity and loss of plasma antioxidants, **Vitamin E** and sulfhydryl groups in patients with burns: the 1993 Moyer Award. *J. Burn Care Rehabil.* 14(6):602-9, November-December 1993.

SUMM . . . maintains higher levels of antioxidants in the tissues than ordinary vitamins taken once daily since water soluble antioxidants such

as **vitamin C** and the B vitamins are utilized and need to be replaced throughout the day.

SUMM Specific antioxidant micronutrients such as **vitamins E**, C, beta-carotene, selenium, copper, manganese, magnesium, folic acid, vitamin B6, and vitamin B12 and other nutritional compounds formulated into the . . .

SUMM fatty . . . induce risks. It is known that aspirin taken with omega-3 acid supplementation in humans prolongs bleeding time and that

vitamin E with aspirin reduces the concentration of vitamin E needed to inhibit platelet aggregation. See Violi, et al, *Atherosclerosis* 82:247-252, 1990.

SUMM It has been shown in animal models that taking **ascorbic acid** or acetylsalicylic acid alone did not simulate or inhibit the production of interleukin-6 whereas a combination of both substances

caused. . .

SUMM The bioflavonoid **quercetin** scavenges the superoxide anion radical directly and inhibits cyclooxygenase as does aspirin. See Gu Zhen-Lun et al., *Acta pharmacologica Sinica* . . .

SUMM . . . gastrointestinal, cerebrovascular or renal bleeding can occur from all dose levels of aspirin intake. The formulation avoids high levels of **vitamin E** and fish oil found in some vitamin preparations that may produce excessive bleeding when combined with aspirin.

SUMM . . . Module 4 are unique as they contain original dosage levels of nutrients that provide definitive health advantages individually or synergistically. **Vitamin C** protects the duodenum against aspirin-induced duodenal injury and bleeding. See McAlindon, M. E. et al *Effect of allopurinol, sulphasalazine, and vitamin C on aspirin induced gastroduodenal injury in human volunteers*, Gut, 38(4), 1996, p.518-24. Antioxidant vitamins such a C, and E, plus.

. . . human lymphocyte function by n-6 and n-3 polyunsaturated fatty acids and acetylsalicylic acid. *Ann Nutri. Metab.* 1993, 37 (3) p.146-59.

**Vitamin E** is required for the oxidation of long chain polyunsaturated fatty acids at the mitochondrial membranes, such as eicosanoids, the synthesis. . .

DETD . . . low dose aspirin may occur by the action of another micronutrient in the modular formulations, such as vitamins B6, or **vitamin C**, or **vitamin E** by the special way the formula is taken in the AM and PM; or in the addition of the stress. . .

DETD . . . on a daily basis. The formulations contain no vitamin K to prevent interference with aspirin's effects. The formulas may contain **vitamin C** to help heal aspirin-induced gastric irritation. The antioxidant lycopene has been added to protect the antioxidant function of **vitamin C** and other antioxidants. The formulas contain no citrates, acetates or phosphates which can react with aspirin to produce potentially toxic compounds.

The formulas avoid excessive beta carotene which may negatively affect the activity of alpha-tocopherol (**vitamin E**). This effect has been taken into account in the formulations by providing appropriate doses. The formulas utilize water soluble **vitamin**

**E** which do not require dietary lipids for absorption. The inclusion of coenzyme Q-10, as a facilitator of **vitamin E**, and a ubiquitous intracellular antioxidant, which has recently been found to preserve myocardial function, is a useful and unique advantage. . . of excess copper in the formula helps prevent the negative effects of copper which can oppose the antioxidant action of **vitamin E**. The formulas may also contain capsicum or chili pepper to counteract aspirin's negative effects on prostaglandins. Alternately the aspirin or. . .

DETD	. . .	about 2,000 mcg
Lycopene		about 50.0 to about 10,000 mcg
Lutein		about 50.0 to about 5,000 mcg
Zeaxanthin		about 5.0 to about 500 mcg
<b>Vitamin C</b>		about 20.0 to about 1,000 mg
Vitamin D		about 0.0 to about 400 IU
<b>Vitamin E</b>		about 5.0 to about 2,000 mg
Grape Seed Extract		about 0.0 to about 300 mg
Green Tea Extract		about 0.0 to about 500 mg
Hawthorne Berry Extract*		about 0.0 to about 500 mg
* (Crataegus Oxyacantha)		
L-Carnitine		about 0.0 to about 700 mg
<b>Alpha Lipoic Acid</b>		about 0.0 to about 750 mg
Taurine		about 15.0 to about 1,000 mg
Quercitin		about 0.0 to about 500 mg
Garlic		about 0.0. . .
DETD		The formulas may contain other synergistic dietary or nutritional compounds such as garlic, bioflavonoids, <b>quercetin</b> , capsicum, boron, melatonin & DHEA. The formulas may also contain glycerol, sorbitol, sucrose, magnesium stearate and other excipients and binders..
DETD	. . .	100 mcg -- 100 mcg 200 mcg Vitamin B12 (Cobalamin) 6 mcg 3 mcg
		6 mcg 3 mcg 6 mcg <b>Vitamin C*</b> (Buffered Calcium Ascorbate, 150 mg 150 mg 600 mg 100 mg 200 mg <b>Ascorbic Acid</b> and Ascorbyl Palmitate) <b>Vitamin D3</b> (Cholecalciferol) 300 IU 100 IU -- <b>Vitamin E</b> (d-alpha Tocopheryl Succinate) 60 IU 40 IU 30 IU 100 IU 200 IU Calcium (Carbonate, Ascorbate) 225 mg 275 mg. . . mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg Green Tea Extract 25 mg
50		mg <b>Quercetin</b> 50 mg 200 mg Hawthorne Berries* (Flavones) 2 mg 5 mg <b>Alpha Lipoic Acid</b> 30 mg 100 mg
DETD	. . .	100 mcg -- 100 mcg 200 mcg Vitamin B12 (Cobalamin) 6 mcg 3 mcg
		6 mcg 3 mcg 6 mcg <b>Vitamin C*</b> (Buffered Calcium Ascorbate, 150 mg 100 mg 600 mg 100 mg 200 mg <b>Ascorbic Acid</b> and Ascorbyl Palmitate) <b>Vitamin D3</b> (Cholecalciferol) 300 IU 100 IU -- <b>Vitamin E</b> (d-alpha Tocopheryl Succinate) 70 IU 30 IU 30 IU 100 IU 200 IU Calcium (Carbonate, Ascorbate) 200 mg 345 mg. . . mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg Green Tea Extract 25 mg
50		mg <b>Quercetin</b> 50 mg 200 mg Hawthorne Berries* (Flavones) 2 mg 5 mg <b>Alpha Lipoic Acid</b> 30 mg 100 mg
CLM		What is claimed is: about 2,000 mcg
		Lycopene about 50.0 to about 10,000 mcg
		Lutein about 50.0 to about 5,000 mcg
		Zeaxanthin about 5.0 to about 500 mcg
		<b>Vitamin C</b> about 20.0 to about 1,000 mg

Vitamin D	about 0.0 to about 400 IU
<b>Vitamin E</b>	about 5.0 to about 2,000 mg
Grape Seed Extract	about 0.0 to about 300 mg
Green Tea Extract	about 0.0 to about 500 mg
Crataegus	about 0.0 to about 500 mg
Oxyacantha Extract	about 0.0 to about 700 mg
L-carnitine	about 0.0 to about 700 mg
Alpha Lipoic Acid	about 0.0 to about 750 mg
Taurine	about 15.0 to about 1,000 mg
Quercitin	about 0.0 to about 500 mg, and
Garlic	about. . .
AN 1999:106123 USPATFULL	
TI Acetylsalicylic acid and micronutrient supplementation for nutritional losses and coronary heart disease	
IN Riley, Patricia A., Sunrise, FL, United States	
Christakis, George, Sunrise, FL, United States	
PA Medical Doctor's Research Institute, Inc., Sunrise, FL, United States (U.S. corporation)	
PI US 5948443 19990907	<--
AI US 1997-804494 19970221 (8)	
DT Utility	
EXNAM Primary Examiner: Moezie, Minna	
LREP Holland & Knight LLP	
CLMN Number of Claims: 1	
ECL Exemplary Claim: 1	
DRWN No Drawings	
LN.CNT 1608	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 7 OF 25 USPATFULL	
AB Pigmentation of the skin, hair and/or nails of individuals is promoted by administering thereto, advantageously topically and advantageously in	
	combination with enzymes exhibiting tyrosinase activity, effective pigmentation-promoting amounts of at least one retinoid compound which comprises a phenolic or naphtholic functional group.
PI US 5942531 19990824	<--
SUMM . . . J. Am. Med. Assoc., 259, 527-532 (1988)). Furthermore, the combination of vitamin A derivatives and antioxidants such as quinones or <b>flavonoid</b> derivatives is known to reduce the level of melanin both in hyperpigmented skin and in normal skin (U.S. Pat. No.. . .)	
SUMM Retinol (vitamin A) and derivatives thereof, tocopherol ( <b>vitamin E</b> ) and derivatives thereof, essential fatty acids, ceramides, essential oils, and salicylic acid and derivatives thereof are representative lipophilic active agents.	
SUMM (j) anti-free-radical agents such as .alpha.-tocopherol or esters thereof, superoxide dismutases, certain metal-chelating agents or <b>ascorbic acid</b> and esters thereof;	

DETD

Compound of formula (3)

	0.500	g
<b>Vitamin D3</b>	0.020	g
Cetyl alcohol	4.000	g
Glyceryl monostearate	2.500	g
PEG-50 stearate	2.500	g
Karite butter	9.200	g
Propylene glycol	2.000	g
Methyl para-hydroxybenzoate	0.075	g

Propyl. . .

AN 1999:99679 USPATFULL

TI Phenolic/naphtholic retinoids for promoting skin/exoskeleton

IN pigmentation  
Diaz, Philippe, Nice, France  
Charpentier, Bruno, Biot, France  
Shroot, Braham, Antibes, France  
PA Centre International de Recherches Dermatologiques, Valbonne, France  
(non-U.S. corporation)  
PI US 5942531 19990824 <--  
AI US 1998-21396 19980210 (9)  
PRAI FR 1997-1500 19970210  
DT Utility  
EXNAM Primary Examiner: Reamer, James H.  
LREP Burns, Doane, Swecker & Mathis, L.L.P.  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 735  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 8 OF 25 USPATFULL

AB Described are the use of compounds of Formula (I), depicted below, as active principals for treating skin conditions; compositions containing these compounds; and methods of treating skin conditions using these compounds and compositions. ##STR1## wherein R.<sub>sub.4</sub> is (CR.<sub>sub.5</sub> R.<sub>sub.6</sub> --CR.<sub>sub.7</sub> R.<sub>sub.8</sub> --X.<sub>sub.1</sub>).sub.n --CR.<sub>sub.9</sub> R.<sub>sub.10</sub> --C(.dbd.X.<sub>sub.2</sub>)X.<sub>sub.3</sub> R.<sub>sub.11</sub>, n is an integer from 1 to 18; R.<sub>sub.1</sub>, R.<sub>sub.2</sub>, R.<sub>sub.3</sub>, R.<sub>sub.5</sub>, R.<sub>sub.6</sub>, R.<sub>sub.7</sub>, R.<sub>sub.8</sub>, R.<sub>sub.9</sub>, R.<sub>sub.10</sub> and R.<sub>sub.11</sub>, are independently, hydrogen or non-hydrogen substituents; and X, X.<sub>sub.1</sub>, X.<sub>sub.2</sub>, X.<sub>sub.3</sub>, Y and Z are independently, O, NH, or S.

PI US 5932229 19990803 <--

SUMM . . . keratolytic agent, such as salicylic acid and benzoyl peroxide, and skin lightening agents such as kojic acid benzoquinone, licorice derivatives, **ascorbic acid** and its derivatives (e.g. magnesium ascorbyl phosphate), and glycerhetinic acid and its derivatives.

SUMM (i) vitamins including, for example, enzyme co-factors such as vitamin B6, vitamin B12, **vitamin D3**, 1,25-dihydroxy **vitamin D3**, vitamin B1, vitamin B2, vitamin K, **vitamin E**, tocotrienols and their derivatives, nicotinic acid and its esters, pantothenic acid and its esters, panthenol, folic acid and its derivatives.

SUMM . . . of the oxa diacids in combination with antioxidants with phenolic hydroxy functions such as gallic acid derivatives (e.g. propyl

gallate), bio-flavonoids (e.g. quercetin, rutin, daidzein, genistein), ferrulic acid derivatives (e.g. ethyl ferulate, diethyl ferulate).

ethyl ferrulate, sodium ferrulate), 6-hydroxy-2,5,7,tetramethylchroman-2-carboxylic acid. The compositions may also contain effective concentrations of water soluble antioxidants such as uric acid, reductic acid, tannic acid, rosmarinic acid and catechins.

acid, tannic acid, rosmarinic acid and catechins. SUMM . . . contain are those that have one or more thiol functions (—SH), in either reduced or non-reduced form, such as glutathione, lipoic acid, thioglycolic acid, and other sulphhydryl compounds. The levels of sulphhydryl anti-oxidants should not exceed 0.5%.

for cosmetic uses of the

AN 1889-88808 USPATELL

AN 1999:08808 USPA/Full  
TI Oxa diacids and related compounds for treating skin conditions

II Oxa diacids and related compounds for treating  
IN Ptschelintsev, Dmitri. Mahwah, N.J. United States

Scancarella, Neil, Wyckoff, NJ, United States

Kalafsky, Robert, 1927-, United States  
Kalafsky, Robert, 1927-, United States

PA Avon Products, Inc., New York, NY, United States

100 BROADWAY, NEW YORK, N.Y., UNITED STATES

PI US 5932229 19990803  
AI US 1997-850333 19970502 (8)  
RLI Continuation-in-part of Ser. No. US 1996-636540, filed on 25 Apr 1996,  
now patented, Pat. No. US 5834513  
DT Utility  
EXNAM Primary Examiner: Venkat, Jyothsna  
LREP Ohlandt, Greeley, Ruggiero & Perle, L.L.P.  
CLMN Number of Claims: 32  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 915  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 9 OF 25 USPATFULL

AB Novel uses of 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol, 3'-(L-ascorbyl-3-o-phosphoryl)-cholesterol, structural or functional isomers thereof and salts thereof (referred to collectively as "APC compounds") are disclosed. Such novel uses include a method of reducing epidermal synthesis of abnormal elastin, especially epidermal synthesis of abnormal elastin that results from exposure to UV radiation. Also disclosed is a novel method of stimulating keratinocyte formation of triglycerides. In addition, a novel method of achieving antioxidant activity, both in the skin and also in topical compositions, is disclosed.

PI US 5922335 19990713

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SUMM U.S. Pat. No 5,474,991 to Ogata et al. describes a phosphoric acid diester of **ascorbic acid** and a tocopherol derivative that affects lipid metabolism and plasma levels of triglycerides, non-esterified fatty acids, total cholesterol, esterified cholesterol, . . .

SUMM . . . discloses stable topical applications of 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol, 3'-(L-ascorbyl-3-o-phosphoryl)-cholesterol, and

their derivatives that provide means of covalently and bioreversibly coupling cholesterol and L-**ascorbic acid**. In these co-pending applications, applicant also discloses that APC compounds stimulate collagen production in cultured human skin fibroblasts.

SUMM The use of L-**ascorbic acid** as an antioxidant in food preparations is known. For example, Steinhart, Pro- and Antioxidative Effect of **Ascorbic Acid** on L-Tryptophan in the Fe3+/

**Ascorbic Acid**/O, J. Agric. Food Chem., Vol. 41, pages 2275-2277 (1993) describes the use of L-**ascorbic acid** as an antioxidant that functions in food to remove free radicals and undergoing rapid oxidation.

SUMM Free L-**ascorbic acid** in topical preparations demonstrates poor stability and tends to break down due to partially oxidative and non-oxidative degradation. The degraded **ascorbic acid** loses activity and the resultant product loses aesthetic appeal since it exhibits a cosmetically undesired brown color. Issued patent U.S. Pat. No. 5,607,968 to applicant discloses a method of

making

**ascorbic acid** -phosphoryl derivatives, which incorporate straight chain (C.sub.2 to C.sub.18) alkyl groups.

SUMM Although the individual benefits of **ascorbic acid** and cholesterol are known, mechanical mixing of L-**ascorbic acid** and cholesterol results in an unstable product due to the instability of L-**ascorbic acid**.

SUMM U.S. Pat. No. 4,939,128 to Kato is directed to the use of phosphoric acid esters of **ascorbic acid** for the treatment of systemic diseases, not for cosmetics, topical dermatological or skin uses. This patent teaches that certain phosphoric acid esters of **ascorbic acid** display improved oxygen scavenging properties. However, the specific mention of a cholestanyl group suggests that conjugates of L-**ascorbic acid** and cholesterol were neither practical nor desired.

SUMM Attempts have been made to conjugate **ascorbic acid**

with a glycyrrhetic group as described in European Application No. 92104149.7; and with a tocopheryl group as indicated by U.S. Pat. No. 3,151,127. For example, U.S. Pat. Nos. 4,564,686, 5,306,713, and 5,474,992 describe phosphate diesters of tocopheryl and **ascorbic acid**, and derivatives thereof, as having anti-oxidant activity.

Also, U.S. Pat. No. 5,478,815 describes the use of ascorbyl tocopherol phosphate compounds. . . .

SUMM . . . of the New Active Commercial Product, IFSCC, Yokohama, Vol. B206, pages 823-864 (1993) describes the use of tocopheryl coupled to L-

**ascorbic acid.** The coupled tocopheryl is an antioxidant preservative for the ascorbyl group, but the use of the ascorbyl-tocopheryl as a skin. . . .

DETD The present invention includes a compound that is a derivative of L-**ascorbic acid.** The compound is formed by a coupling of L-**ascorbic acid** and cholesterol. The novel compound, can be easily included in a topical vehicle, an is selected from the group consisting. . . .

DETD The L-**ascorbic acid** is covalently bound to the cholesterol by phosphoryl or phosphates so that the **ascorbic acid** derivatives set forth above are also called "Ascorbyl-Phosphoryl-Cholesterol" or "APC compounds".

DETD In the APC compounds of the present invention, the conjugated **ascorbic acid** becomes resistant to degradation. The cholesteryl group serves as a carrier moiety and facilitates delivery of polar **ascorbic acid** through the non-polar outermost protective layer of skin (i.e., the stratum corneum) and increases the bioavailability of the **ascorbic acid** in the topical application.

DETD Natural enzymes, such as phosphatases present in the skin, gradually cleave the phosphoryl or phosphate linkage between cholesterol and **ascorbic acid**, resulting in sustained release of free L-**ascorbic acid** and cholesterol into the stratum corneum. The released cholesterol is a natural substrate for skin and supplements that otherwise produced. . . .

DETD . . . with a topical vehicle, and in an even more preferred embodiment about 1.0 to about 10 weight percent of the L-**ascorbic acid** derivative is combined with a topical vehicle.

DETD . . . for additional benefits in topical formulations that include the following ingredients: vitamins, enzyme co-actors such as vitamin B6, vitamin B12, **vitamin D3**, 1,25-dihydroxy **vitamin D3**, vitamin B1, riboflavin, vitamin K, **vitamin E**, tocotrienols and their derivatives, nicotinic acid and its esters, pantothenic acid and its esters, panthenol, folic acid and its derivatives, . . . .

DETD . . . can be used in formulas that contain anti-oxidants with phenolic hydroxy functions, such as gallic acid derivatives (e.g. propyl gallate), bio-flavonoids (e.g. **quercetin**, **rutin**, daidzein, genistein), ferrulic acid derivatives (e.g. ethyl ferrulate, sodium ferrulate), 6-hydroxy-2,5,7,tetra-methylchroman-2-carboxylic acid. The compositions may also contain effective concentrations of water soluble anti-oxidants such as, for example, uric acid, reductic acid, tannic acid, rosmarinic acid and **catechins**. Also the APC compound can be co-formulated with nitric oxide synthase inhibitors to reduce skin redness, vasodilation and inflammatory reactions, . . . .

DETD . . . contain are those that have one or more thiol functions (--SH) in either reduced or non-reduced form such as glutathione, **lipoic acid**, thioglycolic acid and other sulphydryl compounds. The levels of sulphydryl anti-oxidants should not exceed 0.5%

DETD for cosmetic uses of the. . . .

DETD The present invention also relates to a method for coupling a molecule of **L-ascorbic acid** to a molecule of cholesterol. The coupling preferably occurs through a bioreversible phosphate linkage at position 2 or 3 on. . . .

DETD . . . absorption at 1019 wavelengths, with no hydroxyl absorption. Cholesteryl phosphorodichloride was subsequently reacted for 3 hours at room temperature with 5,6-isopropylidene-**L-ascorbic acid** in tetrahydrofuran containing 1.0 equivalent of triethylamine. This reaction yielded a mixture of cholesteryl 5,6 isopropylidene-2-phosphorochloride **L-ascorbic acid** and its isomer cholesteryl 5,6-isopropylidene-3-phosphorochloride **L-ascorbic acid**.

DETD This novel method permits covalent and bioreversible coupling of cholesterol with **L-ascorbic acid** resulting in the stabilization of **ascorbic acid**, and increased bioavailability for **ascorbic acid** and cholesterol.

DETD . . . invention are generally synthesized by (a) reacting cholesterol with a halogenophosphorelating agent, (b) coupling the resulting product with 5,6-hydroxyl protected **L-ascorbic acid**, (c) hydrolyzing the product with water, (d) stripping the protective group with an acidic media, and (e) precipitating the product. . . .

DETD Conjugation with cholesterol converts the polar **ascorbic acid** to a more non-polar lipophilic ascorbyl group that is readily absorbed through the stratum corneum. Once past the stratum corneum, the absorbed compound is able to effect underlying elastin production. The benefits of bioreversed **ascorbic acid** and cholesterol have been previously explained. Surprisingly, the conjugated compound itself inhibits, and thereby regulates, elastin production, which enhances the. . . .

DETD Solutions of 1 .mu.M to 100 .mu.M of each 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol and **ascorbic acid** were produced. These solutions were then supplied to cultured fibroblasts. The control consisted of cultured fibroblasts in media containing neither 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol nor **ascorbic acid**.

DETD It was discovered that 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol decreased elastin promoter activity in cultured fibroblasts in a dose dependent manner. The effect of **ascorbic acid** on elastin promoter activity when compared to the results yielded by 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol demonstrate that 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol exhibits a far superior degree. . . .

DETD In addition, the test results demonstrate that 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol inhibits elastin promoter activity for a significantly longer period of time than **ascorbic acid**. Table 1 below illustrates the relative activity of **ascorbic acid** and 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol.

DETD TABLE A

Comparison table of percent inhibition of elastin promoter activity of 3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol and **ascorbic acid** at 6 hour and 12 hour intervals.

	% Inhibition	
100 .mu. Solution of	at 6 hours	
	at 12 hours	
3'-(L-ascorbyl-2-o-phosphoryl)-cholesterol	43	34
Ascorbic Acid	23	0

DETD 1 .mu.g/ml Vitamin E  
DETD 1 .mu.g/ml Vitamin E  
DETD 1 .mu.g/ml Vitamin E  
AN 1999:78342 USPATFULL  
TI Uses for ascorbyl-phosphoryl-cholesterol in topical compositions  
IN Ptchelintsev, Dmitri, Mahwah, NJ, United States  
PA Avon Products, Inc., New York, NY, United States (U.S. corporation)  
PI US 5922335 19990713 <--  
AI US 1998-126191 19980730 (9)  
RLI Continuation-in-part of Ser. No. US 1997-853271, filed on 9 May 1997  
which is a continuation-in-part of Ser. No. US 1995-440765, filed on 15  
May 1995, now abandoned  
DT Utility  
EXNAM Primary Examiner: Kishore, Gollamudi S.  
LREP Ohlandt, Greeley Ruggiero & Perle, L.L.P.  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)  
LN.CNT 937  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 10 OF 25 USPATFULL  
AB Methods are disclosed for correcting biological information transfer in  
a patient in need of such therapy which comprise administration to a  
patient of a composition comprising a therapeutically effective amount  
of a biocomplex comprising at least one bioactive agent from each of  
the  
three informational blocks of biological information transfer, each  
agent being present in an amount sufficient to correct the biological  
information transfer of the patient under treatment and resulting in  
the  
resumption of normal cell metabolism, said amount being less than the  
buffering amount of said agent; together with a carrier therefor.  
PI US 5885974 19990323 <--  
DETD . . . salt); progesterone (preferably water-soluble and balanced  
with  
HPBC); .beta.-Estradiol, (preferably water-soluble and balanced with  
HPBC); estriol-3-sulfate sodium salt; cholecalciferol sulfate (Vitamin D3 sulfate); epinephrine hydrochloride (adrenalin); arterenol hydrochloride (Noradrenalin); and aldosterone.  
DETD . . . 0.066 g  
Dithiothreitol 0.0016 g  
D-Trehalose 0.1 g  
Sucrose 0.305 g  
D-Sorbitol 1.650 g  
Aprotinin; 1300 KIU  
Activity: 10,000 KIU/ml Solution  
0.13 ml  
(0.000.22 g)  
Glutation 0.04 Ig  
L-Ascorbic Acid; 20-200 Mesh  
0.075 g  
Prionex; 0.025 ml  
(10% Solids in Solution)  
Albumin, Bovine (BSA) 0.025 g  
Ammonium Sulfate 0.26 g  
Potassium Chloride 0.05 g  
Polyethyleneglycol 200. . .  
DETD . . . Acid Sodium Salt  
0.042 g  
Dithiothreitol 0.0008 g  
D-Trehalose 0.053 g  
Sucrose 0.156 g  
D-Sorbitol 0.5 g  
Aprotinin; 700 KIU  
Activity: .about.6300 KIU/me

Glutation	0.11	ml
	0.025	g
<b>L-Ascorbic Acid; 20-200 Mesh</b>		
	0.04	g
Prionex;	0.013	ml
(10% Solids in Solution)		
Albumin, Bovine (BSA)	0.013	g
Ammonium Sulfate	0.13	g
Potassium Chloride	0.025	g
Polyethyleneglycol 200.	.	.
DETD	2.62	g
Cholic Acid Sodium Salt (Sodium Cholate)		
	0.0084	g
Glycocholic Acid Sodium Salt		
	0.0016	g
Taurocholic Acid Sodium Salt		
	0.35	g
Glutation	0.066	g
<b>L-Ascorbic Acid; 20-200 mesh</b>		
	0.118	g
Aprotinin;	1300	KIU
Activity: 10,000 KIU/ml Solution		
	0.18	ml
Prionex;	0.039	ml
(10% Solids in Solution)		
Albumin, Bovine (BSA)	0.039	g
Ammonium.	.	.
DETD	.	Sodium Salt
	0.064	g
Dithiothreitol	0.0013	g
D-Trehalose	0.081	g
Sucrose	0.24	g
D-Sorbitol	0.6	g
Aprotinin;	700	KIU
Activity: 10,000 KIU/ml Solution		
	0.07	ml
Glutation	0.026	g
<b>L-Ascorbic Acid; 20-200 mesh</b>		
	0.05	g
Prionex;	0.019	ml
(10% Solids in Solution)		
Albumin, Bovine (BSA)	0.019	g
Ammonium Sulfate	0.16	g
Potassium Chloride	0.03	g
Polyethylene glycol.	.	.
DETD	.	- 21-sulfate;
	1.8	.mu.g
Potassium Salt		
Progesterone	6	.mu.g
(water-soluble; balanced with HPBC)		
.beta.-Estradiol	100	ng
(water-soluble; balanced with HPBC)		
Estriol-3-Sulfate Sodium salt		
	70	ng
Cholecalciferol Sulfate (Vitamin D3)		
	500	.mu.g
sulfate)		
Epinephrine hydrochloride		
	200	ng
(Adrenalin)		
Arterenol hydrochloride		
	200	ng
(Noradrenalin)		
d-Aldosterone-21-Hemisuccinate		
	125	ng
Delivery system of Example A		

---

DETD . . . with HPBC)  
 Corticosterone-21-Sulfate  
     1.8 .mu.g  
 Progesterone      7.2 .mu.g  
 (water-soluble; balanced with HPBC)  
 .beta.-Estradiol    50 ng  
 (water-soluble; balanced with HPBC)  
 Estriol-3-Sulfate Sodium Salt  
     40 ng  
 Cholecalciferol Sulfate  
     1000 .mu.g  
 (Vitamin D3 Sulfate)  
 Epinephrine hydrochloride  
     50 ng  
 (Adrenalin)  
 Arterenol hydrochloride  
     50 ng  
 (Noradrenalin)  
 d-Aldosterone-21-Hemisuccinate  
     200 ng  
 Delivery system of Example A  
     26.14 g

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DETD . . . with HPBC)  
 Corticosterone-21-Sulfate  
     1.8 .mu.g  
 Progesterone      7.2 .mu.g  
 (water-soluble; balanced with HPBC)  
 .beta.-Estradiol    30 ng  
 (water-soluble; balanced with HPBC)  
 Estriol-3-Sulfate Sodium Salt  
     20 .mu.g  
 Cholecalciferol Sulfate 1500 .mu.g  
 (Vitamin D3 Sulfate)  
 Epinephrine hydrochloride  
     25 ng  
 (Adrenalin)  
 Arterenol hydrochloride 25 ng  
 (Noradrenalin)  
 .tau.-Aldosterone-21-Hemisuccinate  
     250 ng  
 Delivery system of Example A  
     26.16 g

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DETD . . . ml

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Oil Soluble Vitamins  
 Ingredient            Amount 1 kg/cream

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Ergocalciferol (Vitamin D.sub.2)  
     2 mg  
 Act: 4 .times. 10.sup.6 USP/g  
 Cholecalciferol Sulfate Sodium Salt  
     0.6 mg  
 .alpha.-Tocopherol Acetate (Vitamin E)  
     30 mg  
 Act: 1360 IU/g

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DETD . . . mg

---

Part B  
 Ethyl Alcohol      0.3 ml  
 Ergocalciferol (Vitamin D.sub.2)  
     3 mg

Act: 4 .times. 10.sup.6 USP/g  
Cholecalciferol Sulfate Sodium Salt  
0.6 mg  
(Vitamin D<sub>3</sub>.sub.3)  
.alpha.-Tocopherol Acetate (Vitamin E)  
60 mg  
(Act: 1360 IU/g

DETD . . . . .	Sodium Salt	0.002	g
Pantothenic Acid	Hemicalcium Salt		
	0.8	g	
Coenzyme A (COA)		0.0005	g
Pyridoxine Hydrochloride (Vitamin B.sub.6)		0.15	g
Pyridoxal-5-Phosphate (Codecarboxylase)		0.04	g
Ascorbic Acid (Vitamin C)		5	g
Bioactive Agents Part II:			
(pH adjusted to 4.5-5.0)			
2 M Sodium Hydroxide	3.8	ml	
Rutin Hydrate (Vitamin P)		0.7	g
Quercetin (Vitamin P)	0.15	g	
Folic Acid (Pteroylglutamic Acid)		0.03	g
Tetrahydrofolic Acid	0.001	g	
Biotin	0.015	g	
Bioactive Agents Part III:			
(pH adjusted to 4.5-5.0)			
Distilled. . . 80		3	ml
Retinol Palmitate	1.2	g	
(On Gelatin Matrix with Antiox)			
Ergocalciferol (Vitamin D.sub.2)		0.001	g
Cholecalciferol Sulfate (Vitamin D.sub.3)		0.00025	g
Tocopherol Acetate (Vitamin e)		1.5	g
(Does not air oxidize)			
Antioxidant Mixture			
(Prepared on Ethyl Alcohol)			
Span 20	2.0	ml	
Span 80	0.6	ml	
	0.3	ml	

AN 1999:37090 USPATFULL  
TI Therapeutic methods utilizing naturally derived bio-active complexes  
and delivery systems therefor  
IN Danielov, Michael M., 98-25 65th Rd., Apt. 2E, Rego Park, NY, United  
States 11374  
PA Danielov, Michael M., Rego Park, NY, United States (U.S. individual)  
PI US 5885974 19990323 <--  
AI US 1994-350234 19941206 (8)  
DT Utility  
EXNAM Primary Examiner: Criares, Theodore J.  
LREP Helfgott & Karas, P.C.  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 30 Drawing Figure(s); 30 Drawing Page(s)  
LN.CNT 2958  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2001 ACS

AB A multi-agent tri-daily comestible of vitamins, minerals, plant exts..

amino acids, neurochem. precursors, enzymes, and pH-regulating agents which supply key elements necessary for proper metabolism and function

of the human body delivered at specific times of the daily biocycle when the need for such specific agents exists in order to maximize the body's extra- and intra-cellular matrix to cellular and biochem. protective and repair mechanisms utilized to deter the effects of otherwise normal aging.

Formulation of the nutritional supplement of the invention is disclosed.

PI US 5895652 A 19990420

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI US 5895652	A	19990420	US 1997-898090	19970723 <--

IT **Flavonoids**

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(biflavonoids; method of metabolic adjuvanation and cellular repair comprising vitamins, minerals, and plant exts.)

IT 50-81-7, **Vitamin C**, biological studies 56-65-5, ATP, biological studies 58-85-5, Biotin 59-43-8, Vitamin B1, biological studies 60-18-4, L-Tyrosine, biological studies 60-33-3, .alpha.-Linoleic acid, biological studies 67-97-0, **Vitamin D3** 68-19-9, Vitamin B12 70-18-8, L-Glutathione, biological studies 79-83-4, Vitamin B5 83-88-5, Riboflavin, biological studies 87-67-2, Choline bitartrate 87-89-8, Inositol 98-92-0, Vitamin B3 107-35-7, Taurine 110-15-6, Butanedioic acid, biological studies 111-17-1, Thiodipropionic acid 123-28-4, Dilaurylthiodipropionate 127-40-2, Lutein 137-66-6, Ascorbyl palmitate 303-98-0 479-61-8D, complexes 502-65-8, Lycopene 520-26-3D, Hesperidin, complexes 541-15-1, L-Carnitine 556-32-1, Magnesium succinate 616-91-1, n-Acetyl-cysteine 1406-18-4, **Vitamin E** 1592-23-0, Calcium stearate 1987-71-9, Niacinamide ascorbate) 3040-38-8, Acetyl-L-carnitine 5743-27-1, Calcium ascorbate) 7235-40-7, .beta.-Carotene 7439-96-5, Manganese, biological studies 7439-98-7, Molybdenum, biological studies 7440-47-3, Chromium, biological studies 7440-66-6, Zinc, biological studies 7447-40-7, Potassium chloride, biological studies 7553-56-2, Iodine, biological studies 7693-13-2, Calcium citrate 7782-49-2, Selenium, biological studies 7786-30-3, Magnesium chloride, biological studies 8059-24-3, Vitamin B6 9000-92-4, Amylase 9001-00-7, Bromelin 9001-62-1, Lipase 9001-92-7, Protease 9002-72-6, Growth hormone 9012-54-8, Cellulase 11103-57-4, Vitamin A 12001-76-2, Vitamin B-complex 14007-45-5, Potassium aspartate 15431-40-0, Magnesium ascorbate) 18962-61-3, Magnesium aspartate 20724-48-5, L-Ornithine hydrochloride 25167-62-8, Docosahexaenoic acid 26317-27-1, Copper chlorophyllin 27882-76-4 29701-38-0 65666-07-1, Silymarin 223375-03-9

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(method of metabolic adjuvanation and cellular repair comprising vitamins, minerals, and plant exts.)

AN 1999:273547 CAPLUS

DN 130:301715

TI Method of metabolic adjuvanation and cellular repair comprising vitamins, minerals, and plant extracts

IN Giampapa, Vincent C.

PA Longevity Institute International, USA

SO U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 688,267, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI US 5895652	A	19990420	US 1997-898090	19970723 <--
PRAI US 1996-688267		19960729		

RE.CNT 1

RE

(1) Krause And Mahan; Food Nutrition and Diet Therapy 1984, V7th ed, P9

L8 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2001 ACS

AB A cleaning patch for improving skin conditions comprises a polymeric matrix which contains an active ingredient. A skin patch contained acrylic polymer in Et acetate 69.5%, Blue de Prusse pigment 0.5, urea 20, and salicylic acid 10%. The patch is used for the treatment of acne.

PI EP 933077 A1 19990804

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 933077	A1	19990804	EP 1998-403340	19981230 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

FR 2774287 A1 19990806 FR 1998-1070 19980130 &lt;--

FR 2774287 B1 20000512

JP 11269032 A2 19991005 JP 1999-14767 19990122 &lt;--

CN 1227095 A 19990901 CN 1999-101713 19990129 &lt;--

IT 50-14-6, Vitamin d2 50-21-5, biological studies 50-78-2, Acetyl salicylic acid 50-81-7, L-Ascorbic acid, biological studies 57-13-6, Urea, biological studies 57-50-1, Sucrose, biological studies 58-85-5, Vitamin h 59-02-9, D-.alpha.-Tocopherol 59-30-3, Folic acid, biological studies 67-97-0, Vitamin d3 68-26-8, Retinol 68-26-8D, Retinol, esters 69-72-7, biological studies

77-92-9, biological studies 79-14-1, biological studies 79-81-2, Retinol palmitate 83-88-5, Vitamin b2, biological studies 87-69-4 90-64-2, Mandelic acid 97-59-6, Allantoin 117-39-5, Quercetin 123-31-9, 1,4-Benzenediol, biological studies 137-66-6, Ascorbyl palmitate 464-92-6, Asiatic acid 471-53-4, Glycyrrhetic acid 501-30-4, Kojic acid 515-69-5, .alpha.-Bisabolol 1309-37-1, Iron oxide

(Fe2O3), biological studies 1314-13-2, Zinc oxide, biological studies 1314-23-4, Zirconium oxide, biological studies 1332-37-2, Iron oxide, biological studies 1406-16-2, Vitamin d 1449-05-4, .beta.-Glycyrrhetic acid 4602-84-0, Farnesol 5281-04-9, Dc red # 7 6915-15-7, Malic acid 7069-42-3, Retinol propionate 7235-40-7, .beta. Carotene 8059-24-3, Vitamin b6 9000-01-5, Gum arabic 9000-30-0,

Guar gum 9000-65-1, Gum tragacanth 9002-86-2, Polyvinyl chloride 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9004-34-6D, Cellulose, semi-synthetic derivs. 9004-61-9, Hyaluronic acid 9005-25-8, Starch, biological studies 10191-41-0, DL-.alpha.-Tocopherol 11032-50-1, Vitamin pp 11118-57-3, Chromium oxide 11129-18-3, Cerium oxide 13463-67-7, Titanium oxide, biological studies 16830-15-2, Asiaticoside 18449-41-7, Madecassic acid 24937-78-8, Ethylene vinyl acetate copolymer 29548-30-9, Farnesyl acetate 52225-20-4, DL-.alpha.-Tocopherol acetate 74563-64-7, Phytanetriol 78418-01-6, n-Octanoyl-5-salicylic acid

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cleaning patch for improving skin condition)

AN 1999:505749 CAPLUS

DN 131:134425

TI Cleaning patch for improving the skin condition

IN Gueret, Jean-Louis

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 933077	A1	19990804	EP 1998-403340	19981230 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 FR 2774287 A1 19990806 FR 1998-1070 19980130 <--  
 FR 2774287 B1 20000512  
 JP 11269032 A2 19991005 JP 1999-14767 19990122 <--  
 CN 1227095 A 19990901 CN 1999-101713 19990129 <--  
 PRAI FR 1998-1070 19980130  
 RE.CNT 2  
 RE

(1) Lavipharm; FR 2750050 A 1997 CAPLUS  
 (2) The Procter And Gamble Co; WO 9402674 A 1994

L8 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2001 ACS  
 AB The therapeutic compns. of the present invention comprise the following active ingredients: One or more vitamins and/or provitamins, One or more amino acid metal chelates, Echinacea ext., Gingko biloba ext., One or more antioxidants, together with a pharmaceutically acceptable carrier vehicle.

PI AU 702894 B2 19990311

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AU 702894	B2	19990311	AU 1996-71904	19961121 <--
	AU 9671904	A1	19970529		

IT Flavonoids

Vitamins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (therapeutic compns. contg. vitamins and/or provitamins, amino acid metal chelates, Echinacea ext. and other ingredients)

IT 50-81-7, L-Ascorbic acid, biological studies  
 52-90-4, Cystein, biological studies 59-30-3, Folic acid, biological studies 62-49-7, Choline 67-97-0, Vitamin d3  
 68-19-9, Cyanocobalamin 1406-18-4, Vitamin e  
 7235-40-7, .beta.-Carotene 13408-78-1, Cobalamin  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (therapeutic compns. contg. vitamins and/or provitamins, amino acid metal chelates, Echinacea ext. and other ingredients)

AN 1999:529372 CAPLUS

DN 131:134675

TI Therapeutic compositions

IN Raymont, Warwick Deane

PA Stolair Pty Ltd, Australia

SO Pat. Specif. (Aust.), 18 pp.

CODEN: ALXXAP

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AU 702894	B2	19990311	AU 1996-71904	19961121 <--
	AU 9671904	A1	19970529		
PRAI	AU 1995-6723		19951121		

L8 ANSWER 14 OF 25 USPATFULL

AB Described are the use of compounds of Formula (I) depicted below, as active principals for treating skin conditions and compositions containing these compounds, ##STR1## where R.sub.4 is (CR.sub.5 R.sub.6 --CR.sub.7 R.sub.8 --X.sub.1).sub.n --CR.sub.9 R.sub.10 R.sub.11 ; n is an integer from 1 to 18; R.sub.1, R.sub.2, R.sub.3, R.sub.5, R.sub.6, R.sub.7, R.sub.8, R.sub.9, R.sub.10 and R.sub.11 are, independently, hydrogen or substituents selected from alkyls, alkenyls, oxa-alkyls, aralkyls and aryls; and X, X.sub.1, Y and Z are, independently, oxygen.

PI US 5847003 19981208 <--

SUMM . . . keratolytic agents such as salicylic acid and benzoyl peroxide,

and skin lightening agents such as kojic acid, benzoquinone, licorice

derivatives, ascorbic acid and its derivatives (e.g. magnesium ascorbyl phosphate), glycerhetinic acid and its derivatives. The oxa acids can also be used readily. . .

SUMM (i) vitamins, enzyme co-factors such as vitamin B6 (pyrodoxine-HCl), vitamin B12 (cyanocobalamin), vitamin D.sub.3 (cholecalciferol), 1,25-dihydroxy vitamin D3, vitamin B1 (thiamine), vitamin B2 (riboflavin), vitamins K.sub.n, vitamin E (tocopherol), tocopheryl acetate, tocopheryl hemisuccinate, tocopheryl ascorbyl phosphate, tocopheryl linoleate, tocotrienols and their derivatives, nicotinic acid and its esters, pantothenic. . .

SUMM . . . composition of the invention can also contain antioxidants with phenolic hydroxy functions such as gallic acid derivataives (e.g. propyl gallate), bio-flavonoids (e.g. quercetin, rutin, daidzein, genistein), ferrulic acid derivatives (e.g. ethyl ferrulate, sodium ferrulate), 6-hydroxy-2,5,7-tetramethylchroman-2-carboxylic acid. The compositions may also contain effective concentrations of water soluble antioxidants such as, by way of example, uric acid, reductic acid, tannic acid, rosmarinic acid and catechins. Also of benefit is a coformulation of oxa acids with nitric oxide synthase inhibitors as a way of reducing skin. . .

SUMM . . . contain are those which have one or more thiol functions (-SH) in either reduced or non-reduced form such as glutathione, lipoic acid, thioglycolic acid, thiolactic acid, thioglycerol and cysteine. The levels of sulphydryl antioxidants should not exceed 0.5% for cosmetic uses of. . .

AN 1998:154308 USPATFULL

TI Oxa acids and related compounds for treating skin conditions

IN Pritchelintsev, Dmitri, Mahwah, NJ, United States

Scancarella, Neil, Wyckoff, NJ, United States

Kalafsky, Robert, Ogdensburg, NJ, United States

PA Avon Products, Inc., New York, NY, United States (U.S. corporation)

PI US 5847003 19981208 <--

AI US 1996-658089 19960604 (8)

DT Utility

EXNAM Primary Examiner: Spivack, Phyllis

LREP Ohlandt, Greeley Ruggiero & Perle

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 922

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 15 OF 25 USPATFULL

AB Described are the use of compounds of Formula (I), depicted below, as active principals for treating skin conditions, compositions containing these compounds, and methods of treating skin conditions using these compounds and compositions. ##STR1## wherein, R.sub.4 is (CR.sub.5 R.sub.6 --CR.sub.7 R.sub.8 --X.sub.1).sub.n --CR.sub.9 R.sub.10 --C(.dbd.X.sub.2)X.sub.3 R.sub.11, with n being an integer from 1 to 18; R.sub.1, R.sub.2, R.sub.3, R.sub.5, R.sub.6, R.sub.7, R.sub.8, R.sub.9, R.sub.10 and R.sub.11 are independently, hydrogen or non-hydrogen substituents; and X, X.sub.1, X.sub.2, X.sub.3, Y and Z are independently, O, NH or S.

PI US 5834513 19981110 <--

SUMM . . . keratolytic agents such as salicylic acid and benzoyl peroxide, and skin lightening agents such as kojic acid, benzoquinone, licorice derivatives, ascorbic acid and its derivatives (e.g. magnesium ascorbyl phosphate), glycerhetinic acid and its derivatives. The oxa diacids can also be used readily. . .

SUMM (i) vitamins, enzyme co-factors such as vitamin B6 (pyrodoxine-HCl), vitamin B12 (cyanocobalamin), vitamin D.sub.3 (cholecalciferol), 1,25-dihydroxy vitamin D3, vitamin B1 (thiamine), vitamin B2 (riboflavin), vitamins K.sub.n, vitamin E (tocopherol), tocopheryl acetate, tocopheryl hemisuccinate, tocopheryl ascorbyl phosphate, tocopheryl linoleate, tocotrienols and their derivatives, nicotinic acid and its esters, pantothenic. . . .  
SUMM . . . composition of the invention can also contain antioxidants with phenolic hydroxy functions such as gallic acid derivataives (e.g. propyl gallate), bio-flavonoids (e.g. quercetin, rutin, daidzein, genistein), ferrulic acid derivatives (e.g. ethyl ferrulate, sodium ferrulate), 6-hydroxy-2,5,7,tetramethylchroman-2-carboxylic acid. The compositions may also contain effective concentrations of water soluble antioxidants such as, by way of example, uric acid, reductic acid, tannic acid, rosmarinic acid and catechins. Also of benefit is a coformulation of oxa diacids with nitric oxide synthase inhibitors as a way of reducing skin. . . .

SUMM . . . contain are those which have one or more thiol functions (-SH) in either reduced or non-reduced form such as glutathione, lipoic acid, thioglycolic acid, thiolactic acid, thioglycerol and cysteine. The levels of sulphydryl antioxidants should not exceed 0.5% for cosmetic uses of. . . .

AN 1998:138945 USPATFULL  
TI Oxa diacids and related compounds for treating skin conditions  
IN Ptchelintsev, Dmitri, Mahwah, NJ, United States  
Scancarella, Neil, Wyckoff, NJ, United States  
Kalafsky, Robert, Ogdensburg, NJ, United States  
PA Avon Products, Inc., New York, NY, United States (U.S. corporation)  
PI US 5834513 19981110 <--  
AI US 1996-636540 19960425 (8)  
DT Utility.  
EXNAM Primary Examiner: Kight, John; Assistant Examiner: Mach, D. Margaret M.  
LREP Ohlandt, Greeley, Ruggiero & Perle  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1037  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2001 ACS  
AB This invention relates to nutrient and therapeutic compns. for treatment and prevention of symptoms and disease conditions assocd. with microangiopathy and macroangiopathy and to methods using the compns. In particular, the invention relates to compns. useful in the treatment of diabetic retinopathy and nephropathy, to compns. useful in the treatment of other retinal disorders including macular degeneration and cataracts, to compns. useful in wound healing, to compns. useful for treatment and prevention of neuropathy, to compns. useful for treatment and prevention of cardiovascular disease and to compns. useful for the treatment and prevention of dental and periodontal disorders. An exemplary diabetic compn. contains bilberry ext., Ca (Krebs), chondroitin sulfate, Cr picolinate, Co Q10, Fenugreek seed powder, Flax seed powder, folic acid, linoleic acid, Ginkgo biloba, Gymnema sylvestre, taurine (or homotaurine), grape seed ext., acetyl L-carnitine, lutein, Mg (Krebs), N-acetyl-L-cysteine, pine bark ext., phytosterol complex, K citrate, protamine sulfate, shark cartilage, soy isolate, green tea polyphenols, vitamin A, vitamin B2, vitamin B6, vitamin B12, vitamin C, vitamin E, and Zn (Krebs).  
PI WO 9833494 A1 19980806

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	WO 9833494	A1	19980806	WO 1998-US2005	19980204 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9861414	A1	19980825	AU 1998-61414	19980204 <--
	EP 1021177	A1	20000726	EP 1998-906094	19980204
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, NL, SE, MC, PT, IE, FI				
AB	. . . complex, K citrate, protamine sulfate, shark cartilage, soy isolate, green tea polyphenols, vitamin A, vitamin B2, vitamin B6, vitamin B12, vitamin C, vitamin E, and Zn (Krebs).				
IT	<b>Flavonoids</b>				
	RL: BAC (Biological activity or effector, except adverse); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation) (bioflavonoids; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)				
IT	50-81-7, Vitamin C, biological studies 67-97-0D, Vitamin D3, derivs. 539-86-6, Allicin 1406-18-4, Vitamin E 7439-95-4D, Magnesium, compds. 7440-47-3D, Chromium, compds. 7440-66-6D, Zinc, compds. 7440-70-2D, Calcium, compds. 9007-28-7, Chondroitin sulfate 11103-57-4, Vitamin A 27882-76-4 29031-19-4				
	RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)				
AN	1998:542962 CAPLUS				
DN	129:166230				
TI	Compositions and methods for prevention and treatment of vascular degenerative diseases				
IN	Kosbab, John V.				
PA	USA				
SO	PCT Int. Appl., 62 pp. CODEN: PIXXD2				
DT	Patent				
LA	English				
FAN.CNT	1				
PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	WO 9833494	A1	19980806	WO 1998-US2005	19980204 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9861414	A1	19980825	AU 1998-61414	19980204 <--
	EP 1021177	A1	20000726	EP 1998-906094	19980204
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1997-37084	P	19970204		
	US 1997-43262	P	19970417		
	WO 1998-US2005	W	19980204		

AB Patches which deliver lipid-sol. drugs and water-sol. drugs at the same time, comprise hydrophobic polymers contg. the active agents, water absorbents, and oils. A mixt. contg. sweet almond oils (contg. trans-retinol), microcryst. **vitamin C**, polyacrylic acid powder, and organopolysiloxane (DC 3.6486) was cured and the mixt. was applied on a polyethylene sheet to a thickness of 0.8 mm. The sheet was assembled with self-adhesive silicone matrix to give a transdermal patch.

PI JP 10287559 A2 19981027 Heisei

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10287559	A2	19981027	JP 1998-93612	19980406 <--
JP 2865659	B2	19990308		
FR 2761889	A1	19981016	FR 1997-4498	19970411 <--
FR 2761889	B1	19991231		
EP 870498	A1	19981014	EP 1998-400647	19980319 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2232616	AA	19981011	CA 1998-2232616	19980409 <--

AB . . . comprise hydrophobic polymers contg. the active agents, water absorbents, and oils. A mixt. contg. sweet almond oils (contg. trans-retinol), microcryst. **vitamin C**, polyacrylic acid powder, and organopolysiloxane (DC 3.6486) was cured and the mixt. was applied on a polyethylene sheet to a . . .

IT 50-14-6, Vitamin D2 50-21-5D, Lactic acid, esters 50-78-2, Acetylsalicylic acid 57-13-6, Urea, biological studies 58-95-7, D-.alpha.-Tocopherol acetate 59-02-9, D-.alpha.-Tocopherol 67-97-0, **Vitamin D3** 68-26-8, Retinol 69-72-7D, Salicylic acid, esters 77-92-9, Citric acid, biological studies 79-14-1D, Glycolic acid, esters 79-81-2, Retinyl palmitate 81-13-0, D-Panthenol 83-88-5, Riboflavin, biological studies 91-53-2, Ethoxyquin 97-59-6, Allantoin 117-39-5, **Quercetin** 123-31-9, 1,4-Benzenediol, biological studies 137-66-6, Ascorbyl palmitate 464-92-6, Asiatic acid

471-53-4 501-30-4, Kojic acid 515-69-5, .alpha.-Bisabolol 1406-16-2, Vitamin D 4602-84-0, Farnesol 7069-42-3, Retinyl propionate 7235-40-7, .beta.-Carotene 8059-24-3, Vitamin B6 9000-01-5, Arabic gum 9000-30-0, Guar gum 9000-65-1, Tragacanth gum 9002-86-2, Polyvinyl chloride 9002-88-4 9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic acid 9003-07-0 9004-34-6, Cellulose, biological studies 9004-61-9, Hyaluronic acid 9005-25-8, Starch, biological studies 9016-00-6, Dimethylsilanediol polymer sru 10191-41-0, DL-.alpha.-Tocopherol 16830-15-2, Asiaticoside 18449-41-7, Madecassic acid 24937-78-8, Ethylene-vinyl acetate copolymer 29548-30-9,

Farnesyl acetate 31900-57-9, Dimethylsilanediol polymer 52225-20-4, DL-.alpha.-Tocopheryl acetate 74563-64-7, Phytantriol 78418-01-6, 5-Octanoyl salicylic acid  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(transdermal patches contg. both lipid-sol. compds. and water-sol. compds. on hydrophobic polymeric layer)

AN 1998:700961 CAPLUS

DN 130:7409

TI Transdermal patches for drug delivery

IN Gueret, Jean-Louis H.

PA L'Oreal S. A., Fr.

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10287559	A2	19981027	JP 1998-93612	19980406 <--

JP 2865659	B2	19990308		
FR 2761889	A1	19981016	FR 1997-4498	19970411 <--
FR 2761889	B1	19991231		
EP 870498	A1	19981014	EP 1998-400647	19980319 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO			
CA 2232616	AA	19981011	CA 1998-2232616	19980409 <--
PRAI FR 1997-4498		19970411		

L8 ANSWER 18 OF 25 USPATFULL

DUPLICATE 1

AB A process is provided for harvesting light absorbing compounds from the epidermal cells of a plant. The plant is subjected to artificial light having wavelengths in the range of 260 to 400 nm. The plant is ground to form a slurry and an enzyme is added to the slurry to breach the walls of cells in the plant to free the light absorbing compounds. A solvent added to the slurry extracts the light absorbing chemicals.

PI US 5603936 19970218

<--

SUMM Sulphoraphane, PEITC (phenethylisothiocyanate), indole-3-carbinol, aurones, chalcones, anthocyanidins, flavanones, anthocyanidins, flavones, flavonols, flavan 3-ols, oligomeric **flavonoids**, biflavonoids, isoflavonoids and other compounds stored in the epidermal cells of plants typically absorb light having wavelengths in the range.

DETD . . . tested to determine the total concentration of chemical compounds including aurones, chalcones, anthocyanidins, flavanones, anthocyanidins, flavones, flavonols, flavan 3,4-diols, oligomeric **flavonoids**, biflavonoids, and isoflavonoids in the epidermal tissue. The grapes are ripe and juicy, are free from insect damages,

and are. . . sample is then tested for the total concentration of the aurones, chalcones, anthocyanidins, flavanones, anthocyanidins, flavones, flavonols, flavan 3-ols, oligomeric **flavonoids**, biflavonoids, and isoflavonoids in the grape. The total concentration

in weight of aurones, chalcones, anthocyanidins, flavanones, anthocyanidins, flavones, flavonols, flavan 3-ols, oligomeric **flavonoids**, biflavonoids, and isoflavonoids per gram of grapes in the twenty gram sample increases by over one hundred percent in comparison. . .

DETD . . . at room temperature with twenty five grams of DMSO-d6 to extract aurones, chalcones, anthocyanidins, flavanones, flavones, flavonols, flavan 3,4-diols, oligomeric **flavonoids**, biflavonoids, and isoflavonoids into the DMSO. After the hour has elapsed, the DMSO-d6 is separated from the extraction mixture. The DMSO-d6 carries aurones, chalcones, anthocyanidins, flavanones, anthocyanidins, flavones, flavonols, flavan 3,4-diols, oligomeric **flavonoids**, biflavonoids, and isoflavonoids.

DETD . . . grams of ethanol at room temperature for one hour to extract aurones, chalcones, anthocyanidins, flavanones, flavones, flavonols, flavan 3,4-diols, oligomeric **flavonoids**, biflavonoids, and isoflavonoids from the extraction mixture into the ethanol. After the hour has elapsed, the ethanol is separated from the extraction mixture. The ethanol carries aurones, chalcones, anthocyanidins, flavanones, anthocyanidins, flavones, flavonols, flavan 3-ols, oligomeric **flavonoids**, biflavonoids, and isoflavonoids.

DETD . . . per g fr wt of the group of chemical compounds including aurones, chalcones, anthocyanidins, flavanones, flavones, flavonols, flavan 3,4-diols, oligomeric **flavonoids**, biflavonoids, and isoflavonoids. The results are shown below in TABLE I. Each sample

noted in TABLE I was extracted from. . .

DETD . . . 1H 0.01800

MANGANESE SULFATE 1H 0.00460

CUPRIC SULFATE 5H 0.00230

CHROMIC CHLORIDE 0.00012

POTASSIUM IODIDE	0.00005
SELENIUM OXIDE	0.00003
MOLYBDENUM TRIOXIDE	0.00003
LECITHIN	0.44000
SODIUM ASCORBATE	0.44000
CHLORINE CHLORIDE	0.21000
<b>VITAMIN E</b> (500 IU/GM)	0.05000
NIACINAMIDE	0.01800
CALCIUM PANTOTHENATE	0.01600
THIAMINE HYDROCHLORIDE	0.00250
PYRIDOXINE HYDROCHLORIDE	0.00300
RIBOFLAVIN	0.00180
<b>VITAMIN A</b> (250,000 IU/GM)	0.01000
FOLIC ACID	0.00044
BIOTIN (1% 10 MG/GM)	0.02500
VITAMIN K 1%	0.00430
<b>VITAMIN D3</b> (1,000,000 IU/GM)	0.00300
CYANOCOBALAMIN (0.1%)	0.00580
SOY POLYSACCHARIDE (FIBER)	7.60000
Total Weight	100.000000

DETD The separated ethanol from Example 14 is mixed with 500 ml of water to form a drink. Sweetener, **vitamin C**, and other desired components can, if desired, be added to the drink. The concentration of plant compounds (of the type. . .

CLM What is claimed is:

9. The process of claim 1, wherein the plant compound is an oligomeric **flavonoid**.

AN 97:14416 USPATFULL|  
 TI Process for removing light absorbing compounds from epidermal plant cells|  
 IN Monte, Woodrow C., Tempe, AZ, United States  
 PA Ratcliff, Richard A., Scottsdale, AZ, United States (U.S. individual)  
 a part interest  
 PI US 5603936 19970218 <--  
 AI US 1995-389023 19950215 (8)  
 DT Utility|  
 EXNAM Primary Examiner: Rollins, John W.|  
 LREP Nissle, Tod R.|  
 CLMN Number of Claims: 20|  
 ECL Exemplary Claim: 1|  
 DRWN No Drawings  
 LN.CNT 548|  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2001 ACS  
 AB An SAR model for inhibition of metabolic cooperation (iMC) was developed.

The structural and physicochem. features assocd. with the ability to cause

iMC are primarily lipophilic moieties consistent with the possibility that

they represent receptor-binding ligands. There are also significant parallels between the structural descriptors assocd. with iMC and those assocd. with tumor promotion and with carcinogenesis in rodents.

Overall,

the present study provides structural evidence that iMC is a feature assocd. with the carcinogenic process.

SO Mutat. Res. (1997), 381(2), 171-188

CODEN: MUREAV; ISSN: 0027-5107

IT 50-00-0, Formaldehyde, biological studies 50-02-2, Dexamethasone  
 50-06-6, Phenobarbital, biological studies 50-18-0, Cyclophosphamide

50-28-2, *.beta.-Estradiol*, biological studies 50-29-3, biological studies 50-32-8, *Benzo[a]pyrene*, biological studies 50-35-1, *Thalidomide* 50-81-7, *L-Ascorbic acid*, biological studies 51-28-5, *2,4-Dinitrophenol*, biological studies 51-43-4, *Adrenalin* 52-53-9, *Verapamil* 53-96-3, *2-Acetylaminofluorene*

55-18-5, *Diethylnitrosamine* 56-23-5, *Carbon tetrachloride*, biological studies 56-53-1, *Diethylstilbestrol* 56-55-3, *Benz[a]anthracene* 56-57-5, *4-Nitroquinoline-N-oxide* 56-81-5, *1,2,3-Propanetriol*, biological studies

56-87-1, *L-Lysine*, biological studies 57-10-3, *Hexadecanoic acid*, biological studies 57-11-4, *Octadecanoic acid*, biological studies 57-41-0, *Diphenylhydantoin* 57-43-2, *Amobarbital* 57-50-1, biological studies 57-55-6, *1,2-Propanediol*, biological studies 57-63-6, *Ethinyl estradiol* 57-88-5, *Cholesterol*, biological studies 57-97-6, *7,12-Dimethylbenz[a]anthracene* 58-08-2, *Caffeine*, biological studies 58-55-9, *Theophylline*, biological studies 58-89-9, *Lindane* 60-24-2 60-33-3, *Linoleic acid*, biological studies 60-57-1, *Dieldrin* 60-92-4, *CAMP* 61-90-5, *L-Leucine*, biological studies 62-75-9, *Dimethylnitrosamine* 63-68-3, *L-Methionine*, biological studies

63-91-2, *L-Phenylalanine*, biological studies 64-17-5, *Ethanol*, biological studies

64-69-7, *Iodoacetic acid* 67-56-1, *Methanol*, biological studies 67-63-0, *Isopropanol*, biological studies 67-64-1, *2-Propanone*, biological studies 67-66-3, biological studies 67-68-5, *Dimethylsulfoxide*, biological studies 67-73-2, *Fluocinolone acetonide* 67-97-0, *Vitamin D3* 68-12-2, *Dimethylformamide*, biological studies 68-23-5, *Norethynodrel* 70-25-7, *N-Methyl-N'-nitro-N-nitrosoguanidine* 70-34-8, *2,4-Dinitrofluorobenzene* 71-00-1, *L-Histidine*, biological studies 71-23-8, *1-Propanol*, biological studies

71-36-3, *1-Butanol*, biological studies 71-41-0, *1-Pentanol*, biological studies 71-43-2, *Benzene*, biological studies 71-44-3, *Spermine* 72-18-4, *L-Valine*, biological studies 72-19-5, *L-Threonine*, biological studies 72-20-8, *Endrin* 72-33-3, *Mestranol* 72-43-5, *Methoxychlor* 72-55-9, *DDE*, biological studies 73-22-3, *L-Tryptophan*, biological studies 73-32-5, *L-Isoleucine*, biological studies 75-05-8, *Acetonitrile*, biological studies 75-07-0, *Acetaldehyde*, biological studies 75-34-3, *Ethylidene chloride* 75-56-9, biological studies 75-91-2, *tert-Butylhydroperoxide* 76-44-8, *Heptachlor* 78-83-1, biological studies 79-01-6, *Trichloroethylene*, biological studies 81-07-2, *Saccharin* 81-25-4, *Cholic acid* 81-81-2, *Warfarin* 83-44-3 87-66-1, *Pyrogallol* 90-05-1, *Guaiacol* 90-43-7, *o-Phenylphenol* 90-97-1, *4,4'-Dichlorobenzhydrol* 90-98-2, *4,4'-Dichlorobenzophenone* 91-59-8, *2-Naphthylamine* 92-87-5, *[1,1'-Biphenyl]-4,4'-diamine* 93-76-5, *2,4,5-Trichlorophenoxyacetic acid* 94-36-0, *Benzoyl peroxide*, biological studies 94-75-7, *2,4-Dichlorophenoxyacetic acid*, biological studies 95-53-4, *o-Toluidine*, biological studies 95-54-5, *o-Phenylenediamine*, biological studies 95-70-5, *2,5-Toluenediamine* 95-80-7, *2,4-Diaminotoluene* 95-83-0, *4-Chloro-o-phenylenediamine* 101-77-9 105-60-2, biological studies 106-50-3, *1,4-Benzenediamine*, biological studies 106-51-4, *1,4-Benzoquinone*, biological studies 107-06-2, biological studies 107-13-1, *2-Propenenitrile*, biological studies 107-21-1, *1,2-Ethanediol*, biological studies 107-41-5, *2-Methyl-2,4-pentanediol* 108-39-4, biological studies 108-45-2, *1,3-Benzenediamine*, biological studies 108-91-8, *Cyclohexanamine*, biological studies 108-93-0, *Cyclohexanol*, biological studies 108-94-1, *Cyclohexanone*, biological studies 108-95-2, *Phenol*, biological studies

109-59-1, *Ethylene glycol monoisopropyl ether* 109-86-4, *Ethylene glycol monomethyl ether* 109-99-9, biological studies 110-60-1, *Putrescine* 110-80-5, *2-Ethoxyethanol* 110-86-1, *Pyridine*, biological studies 111-43-3, *Propyl ether* 111-76-2, *Ethylene glycol mono-n-butyl ether* 112-40-3, *Dodecane* 112-80-1, *9-Octadecenoic acid (Z)-*, biological studies 115-32-2, *Dicofol* 117-39-5, *Quercetin*

117-81-7, Di(2-ethylhexyl)phthalate 119-53-9, Benzoin 120-80-9,  
 1,2-Benzenediol, biological studies 121-14-2, 2,4-Dinitrotoluene  
 121-44-8, biological studies 123-01-3, 1-Phenyldodecane 123-31-9,  
 1,4-Benzenediol, biological studies 123-51-3, Isoamyl alcohol  
 123-86-4, Butyl acetate 123-91-1, 1,4-Dioxane, biological studies  
 124-20-9, Spermidine 126-07-8, Griseofulvin 128-13-2, Ursodeoxycholic  
 acid 128-37-0, Butylated hydroxytoluene, biological studies 130-80-3,  
 Diethylstilbestrol propionate 132-27-4, Sodium o-Phenylphenol  
 134-32-7, 1-Naphthylamine 139-05-9, Sodium cyclamate 141-43-5,  
 biological studies 141-78-6, Ethyl acetate, biological studies  
 143-50-0, Chlordecone 192-97-2, Benzo[e]pyrene 302-79-4, Retinoic  
 acid  
 309-00-2, Aldrin 373-49-9, Palmitoleic acid 402-71-1, TPCK  
 434-13-9,  
 Lithocholic acid 439-14-5, Diazepam 474-25-9, Chenodeoxycholic acid  
 504-40-5, 1,3-Distearin 506-26-3, .gamma.-Linolenic acid 506-30-9,  
 Arachidic acid 506-32-1, Arachidonic acid 510-15-6, Chlorobenzilate  
 516-50-7, Taurodeoxycholic acid 533-73-3, 1,2,4-Benzenetriol  
 544-63-8,  
 Tetradecanoic acid, biological studies 544-64-9 548-93-6,  
 3-Hydroxyanthranilic acid 584-79-2, Bioallethrin 606-20-2,  
 2,6-Dinitrotoluene 615-66-7, 2-Chloro-p-phenylenediamine 759-73-9,  
 1-Ethyl-1-nitrosourea 771-51-7, Indole-3-acetonitrile 789-02-6  
 901-47-3, TAME 937-34-8, Phenylsulfate 1024-57-3, Heptachlor epoxide  
 1079-21-6, 1,1'-Biphenyl-2,5-diol 1143-38-0, Anthralin 1162-65-8,  
 Aflatoxin B1 1404-26-8, Polymyxin B 1406-18-4, Vitamin  
 E 1460-57-7, trans-1,2-Cyclohexanediol 2012-74-0 2051-62-9,  
 4-Chlorobiphenyl 2216-94-6, Ethyl phenylpropiolate 2223-82-7,  
 Neopentylglycol diacrylate 2385-85-5, Mirex 2442-61-7, 1,2-Diolein  
 2465-32-9, 1,3-Diolein 2784-94-3, HC Blue No. 1 2807-30-9, Ethylene  
 glycol mono-n-propyl ether 3524-68-3, Pentaerythritol triacrylate  
 3771-19-5, Nafenopin 5064-31-3, Trisodium nitrilotriacetate  
 5131-60-2,  
 4-Chloro-m-phenylenediamine 5307-14-2, 2-Nitro-p-phenylenediamine  
 5836-10-2, Chloropropionate 7220-81-7, Aflatoxin B2 7722-84-1,  
 Hydrogen  
 peroxide (H2O2), biological studies 8001-35-2, Toxaphene 10453-86-8,  
 Resmethrin 12789-03-6, Chlordane 14930-96-2, Cytochalasin B  
 15818-46-9, 1,3-Dilinolein 15979-35-8, Laccaic acid A 16561-29-8,  
 12-O-Tetradecanoylphorbol-13-acetate 17673-25-5, Phorbol 18181-80-1,  
 Bromopropylate 21259-20-1, T2 Toxin 21829-25-4, Nifedipine  
 22144-77-0, Cytochalasin D 24928-15-2, Phorbol 12,13-diacetate  
 24928-17-4, Phorbol-12,13-didecanoate 25013-16-5, Butylated  
 hydroxyanisole 25235-85-2, 4-Chloroindole 25405-85-0, Phorbol  
 12,13-dibenzoate 26369-40-4, 21,25-Dihydroxy-vitamin  
 D3 27137-31-1 32222-06-3 33229-34-4, HC Blue No. 2  
 37558-16-0, Phorbol-12,13-dibutyrate 37691-11-5, Antipain 50892-23-4  
 51481-10-8, Vomitoxin 51630-58-1, Fenvate 52315-07-8,  
 Cypermethrin  
 52423-28-6, Debromoaplysiatoxin 52645-53-1, Permethrin 52659-57-1,  
 Aplysiatoxin 52918-63-5, Deltamethrin 55700-78-2, Cholesterol-5,6-  
 epoxide 57716-89-9, 4-o-Methyl-12-O-tetradecanoylphorbol-13-acetate  
 57818-92-5, TMB8 59080-40-9, 2,2',4,4',5,5'-Hexabromobiphenyl  
 59261-08-4, 2,2',4,4',6,6'-Hexabromobiphenyl 60044-26-0,  
 3,3',4,4',5,5'-Hexabromobiphenyl 60168-88-9, Fenarimol 63543-22-6,  
 Anhydrodebromoaplysiatoxin 67733-52-2, 2,2',3,4,4',5,5'-  
 Heptabromobiphenyl 67888-97-5, 2,3',4,4',5-Pentabromobiphenyl  
 67889-00-3, 2,2',3,3',4,4',5,5'-Octabromobiphenyl 68359-37-5,  
 Cyfluthrin  
 69278-59-7 70124-77-5, Flucythrinate 77102-82-0, 3,3',4,4'-  
 Tetrabromobiphenyl 81902-33-2, 3,3',4,5,5'-Pentabromobiphenyl  
 RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL  
 (Biological study)  
 (intercellular communication, tumor promotion and nongenotoxic  
 carcinogenesis and relationships based upon structural considerations)  
 AN 1997:761491 CAPLUS

DN 128:111787  
TI Intercellular communication, tumor promotion and nongenotoxic carcinogenesis: relationships based upon structural considerations  
AU Rosenkranz, Margalit; Rosenkranz, Herbert S.; Klopman, Gilles  
CS Department of Environmental and Occupational Health, University of Pittsburgh, Pittsburgh, PA 15238, USA  
SO Mutat. Res. (1997), 381(2), 171-188  
CODEN: MUREAV; ISSN: 0027-5107  
PB Elsevier Science B.V.  
DT Journal  
LA English

L8 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2001 ACS  
AB Glucuronide conjugate of tertiary amine xenobiotics represents a unique and important metabolic pathway for these compds. in humans. In this study, the authors show that human UDP-glucuronosyltransferase 1.4 protein, stably expressed in human embryonic kidney 293 cells, catalyzes the N-glucuronidation of primary, secondary and tertiary amine substrates. In addn., the substrate specificity of the expressed enzyme toward many hydroxylated and carboxylic acid-contg. compds. was examd. Of the hydroxylated compds. tested, only saponins gave glucuronidation rates comparable with those obsd. for amine substrates. The apparent KM and Vmax values for saponins were such that the efficiency of glucuronidation (Vmax/KM) for these compds. was higher than that detd. for amine substrates. Human UDP-glucuronosyltransferase 1.4 also catalyzes the glucuronidation of monoterpenoid alcs. and simple phenolic compds. The enzyme kinetic values detd. for these substrates suggested that this enzyme may have relatively limited significance for the conjugation of these classes of compds. Of the endobiotics tested, androstanediol and progestins were glucuronidated at high rates by expressed human UDP-glucuronosyltransferase 1.4 protein. The glucuronidation efficiency for 5.alpha.-pregnane-3.beta.,20.alpha.-diol was comparable with that detd. for the saponins. Because UDP-glucuronosyltransferases are integral membrane proteins, the effects of different detergents on the catalytic activity of the expressed enzyme were detd. The results show that detergents (such as Lubrol PX, Emulgen 911, and Triton X-100) are inhibitory for the quaternary ammonium-linked glucuronidation of chlorpromazine and imipramine catalyzed by expressed human UDP-glucuronosyltransferase 1.4. In contrast, CHAPS and nonanoyl-N-methylglucamide are less inhibitory toward the glucuronidation of these compds. The results suggest that human UDP-glucuronosyltransferase 1.4 may be an important enzyme for the detoxication of environmentally derived amines and saponins and for the conjugation of progestins.  
SO Drug Metab. Dispos. (1996), 24(3), 356-63  
CODEN: DMDSAI; ISSN: 0090-9556  
IT 50-14-6, Vitamin D2 50-22-6, Corticosterone 50-27-1, Estradiol 50-47-5, Desipramine 50-48-6, Amitriptyline 50-49-7, Imipramine 50-67-9, 5-HT, biological studies 51-48-9, t4, biological studies 51-61-6, Dopamine, biological studies 53-05-4, Tetrahydrocortisone 53-16-7, Estrone, biological studies 53-41-8, Androsterone 53-42-9, Etiocholanolone 53-43-0, Dehydroepiandrosterone 56-75-7, Chloramphenicol 57-27-2, Morphine, biological studies 57-42-1, Meperidine 57-63-6, 17.alpha.-Ethynodiol 57-91-0, 17.alpha.-Estradiol 58-22-0, Testosterone 58-73-1, Diphenhydramine 59-33-6 62-53-3, Benzenamine, biological studies 62-67-9, Nalorphine 63-01-4, 16.alpha.-Hydroxytestosterone 67-97-0, Vitamin D3 68-26-8, all-trans-Retinol 68-96-2, 17.alpha.-Hydroxyprogesterone 69-23-8, Fluphenazine 72-14-0, Sulfathiazole 72-48-0, Alizarin 72-69-5, Nortriptyline 76-42-6, Oxycodone 76-57-3, Codeine 77-60-1, Tigogenin 80-08-0 80-92-2 81-61-8, Quinalizarin 81-64-1, Quinizarin 84-60-6, Anthraflavic acid 86-21-5, Pheniramine 89-83-8, Thymol 90-15-3, 1-Naphthalenol 90-33-5, 4-Methylumbelliferone

90-41-5, 2-Aminobiphenyl 90-43-7, 2-Hydroxybiphenyl 91-85-0,  
Thonzylamine 92-61-5, Scopoletin 92-67-1, 4-Aminobiphenyl 92-69-3,  
[1,1'-Biphenyl]-4-ol 92-87-5, Benzidine 92-88-6,  
[1,1'-Biphenyl]-4,4'-  
diol 93-35-6, Umbelliferone 95-55-6, 2-Aminophenol 97-53-0, Eugenol  
98-55-5, .alpha.-Terpineol 100-02-7, biological studies 103-90-2,  
Acetaminophen 117-39-5, Quercetin 117-89-5, Trifluoperazine  
121-69-7, N,N-Dimethyl aniline, biological studies 122-11-2,  
Sulfadimethoxine 122-39-4, Diphenylamine, biological studies 123-30-8  
135-19-3, 2-Naphthol, biological studies 143-62-4, Digitoxigenin  
143-74-8, Phenol red 145-13-1, Pregnanolone 146-54-3, Triflupromazine  
153-78-6, 2-Aminofluorene 154-23-4, (+)-Catechin 302-79-4,  
all-trans-Retinoic acid 305-01-1, Esculetin 331-39-5, Caffeic acid  
362-05-0, 2-Hydroxyestradiol 362-06-1, 2-Hydroxyestrone 464-45-9,  
(-)-Borneol 465-65-6, Naloxone 467-55-0, Hecogenin 480-40-0,

Chrysins

480-41-1, Naringenin 481-29-8, Epiandrosterone 481-30-1,  
Epitestosterone 497-36-9, endo-Norborneol 499-75-2, Carvacrol  
512-04-9, Diosgenin 516-53-0 518-82-1, Emodin 520-36-5, Apigenin  
520-88-7, 16.alpha.-Hydroxypregnolone 521-18-6, Dihydrotestosterone  
528-48-3, Fisetin 547-81-9, 16-Epi estriol 548-83-4,  
Galangin 562-10-7 562-74-3, Terpinen-4-ol 566-58-5 566-76-7,  
16.alpha.-Hydroxyestrone 571-20-0,

5.alpha.-Androstane-3.beta.,17.beta.-

diol 580-51-8, 3-Hydroxybiphenyl 635-65-4, Bilirubin, biological  
studies 793-89-5, 16,17-Epi estriol 920-66-1 1076-38-6,  
4-Hydroxycoumarin 1135-24-6, Ferulic acid 1158-94-7 1164-98-3,  
21-Hydroxypregnolone 1228-72-4, 17-Epi estriol 1229-24-9,  
6.alpha.-Hydroxyestradiol 1232-80-0, 2-Hydroxyestriol 1851-23-6,  
5.beta.-Androstane-3.alpha.,17.beta.-diol 1852-53-5,  
5.alpha.-Androstane-3.alpha.,17.beta.-diol 1977-10-2, Loxapine  
2052-63-3, 13-cis Retinol 2102-59-2 2216-51-5, (-)-Menthol  
2216-52-6, (+)-Neomenthol 2217-02-9, (1R)-Endo Fenchyl alcohol  
2321-07-5 2784-27-2, 5-(p-Hydroxyphenyl)-5-phenylhydantoin 3131-23-5,  
4-Hydroxyestrone 3313-26-6, cis-Thiothixene 5976-61-4,  
4-Hydroxyestradiol 6104-71-8, Desmethyl clozapine 6665-86-7,  
7-Hydroxyflavone 6893-02-3, T3 7291-49-8, 6.alpha.-Hydroxyestriol  
10236-47-2, Naringin 13721-01-2D, hydroxy analogs 14167-50-1,  
5.beta.-Androstane-3.alpha.,16.alpha.-diol-17-one 15356-60-2,  
(+)-Menthol 15687-27-1, Ibuprofen 16590-41-3, Naltrexone

20685-55-6,

5.beta.-Androstane-3.alpha.,11.beta.,17.beta.-triol 22204-53-1  
22494-42-4, Diflunisal 22564-99-4, (.+-.)-Linalool 23283-97-8,  
(+)-Isomenthol 24393-70-2, (.+-.)-Isoborneol 26093-31-2,  
7-Amino-4-methylcoumarin 30074-03-4, 5-(m-Hydroxyphenyl)-5-  
phenylhydantoin 31879-05-7, Fenoprofen 32212-61-6,  
5.beta.-Androstane-3.alpha.,11.alpha.,17.beta.-triol 32212-64-9,  
5.alpha.-Androstane-3.alpha.,11.beta.,17.beta.-triol 32212-65-0,  
5.alpha.-Androstane-3.beta.,11.beta.,17.beta.-triol 35836-73-8,  
(-)-Nopol 50679-08-8, Terfenadine 52485-79-7, Buprenorphine  
60133-16-6, (.+-.)-exo-Norborneol 65165-99-3, (+)-Morphine  
114798-26-4, Losartan

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(glucuronidation of amines and hydroxylated xenobiotics and

endobiotics

catalyzed by expressed human UDP-glucuronosyltransferase 1.4 protein  
and its response to detergents)

AN 1996:165084 CAPLUS

DN 124:277873

TI Glucuronidation of amines and hydroxylated xenobiotics and endobiotics  
catalyzed by expressed human UGT1.4 protein

AU Green, Mitchell D.; Tephly, Thomas R.

CS Dep. Pharmacol., Univ. Iowa, IA, USA

SO Drug Metab. Dispos. (1996), 24(3), 356-63

CODEN: DMDSAI; ISSN: 0090-9556

DT Journal

LA English

L8 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2001 ACS

AB Ninety potential chemopreventive agents were screened using 6 chemoprevention-assocd. biochem. end points. These compds. were tested using rodent (tracheal epithelial or liver) cells and human cells [neonatal foreskin fibroblasts, bronchial epithelial cells, or human leukemic cells (HL-60)]. The effects measured were: (a) inhibition of 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced ornithine decarboxylase

(ODC) activity in rat tracheal epithelial cells; (c) inhibition of poly(ADP-ribose)polymerase in propane sultone-treated primary human fibroblasts; (d) inhibition of benzo[a]pyrene (B[a]P)-DNA binding in

human bronchial epithelial cells; (e) induction of reduced glutathione in Buffalo rat liver cells; and (f) inhibition of TPA-induced free radical formation in primary human fibroblasts or HL-60 cells. Fifty compds.

were highly effective in inhibiting TPA-induced tyrosine kinase activity.

This assay identified compds. from a wide variety of chem. classes as effective

inhibitors, including all the vitamins, retinoic acid analogs, protein kinase C inhibitors, and chems. belonging to the amino acid category. Fifty-two chems. were classified as highly pos. compds. when examd. for their ability to inhibit TPA-induced ODC activity. These agents showed a dose-dependent inhibition or inhibition at all doses. Retinoids, in general, exhibited strong inhibition of ODC activity. A category of compds. showing dose-dependent inhibition were the sulfur compds., esp. the thiols and thiones. Among the natural products, terpenes were strong inhibitors of ODC. Forty-seven compds. were classified as strong inhibitors of poly(ADP-ribose)polymerase. In the carcinogen-DNA binding inhibition assay, 21 compds. were identified as strong inhibitors, which include phenolic compds. as well as sulfur compds. Vitamins and their analogs were also good inhibitors. Testing for induced glutathione yielded 19 compds. that were good inducers. Sulfur-contg. compds. and most of the phenolic compds. were also inducers of glutathione. Twenty compds. were highly pos. for inhibition of TPA-induced free radical formation. A significant no. of phenolic and sulfur compds. were again strong oxygen radical scavengers. Some antiinflammatory agents were also identified as free radical inhibitors. In general, retinoids were quite active in all the assays. Eight compds. were pos. in all of the six assays; these were **vitamin C (ascorbic acid)**, bismuththiol, esculetin, etoperidone, folic acid, hydrocortisone, indole-3-carbinol, and tocopherol succinate. Agents that were pos. in these assays may inhibit the carcinogenesis process by similar mechanisms in humans and are identified as candidates for development as chemopreventive agents. Agents capable of inhibiting multiple mechanisms are regarded as highly promising agents for cancer chemoprevention.

SO Cancer Res. (1994), 54(22), 5848-55

CODEN: CNREA8; ISSN: 0008-5472

AB . . . retinoids were quite active in all the assays. Eight compds. were pos. in all of the six assays; these were **vitamin C (ascorbic acid)**, bismuththiol, esculetin, etoperidone, folic acid, hydrocortisone, indole-3-carbinol, and tocopherol succinate. Agents that were pos. in these assays may inhibit the . . .

IT 50-23-7, Hydrocortisone 50-78-2, Aspirin 50-81-7, **Vitamin C**, biological studies 52-53-9, Verapamil 53-03-2, Prednisone 53-43-0, Dehydroepiandrosterone 53-86-1, Indomethacin 57-83-0, Progesterone, biological studies 58-27-5, Vitamin K3 58-95-7, .alpha.-Tocopherol acetate 59-30-3, Folic acid, biological studies 59-67-6, Nicotinic acid, biological studies 60-87-7, Promethazine 62-46-4, Thioctic acid 67-73-2, Fluocinolone acetonide 67-97-0, **Vitamin D3** 68-26-8, Retinol 81-54-9, Purpurin 81-88-9, Rhodamine B 83-46-5, .beta.-Sitosterol 87-11-6, Thiolutin

92-43-3, Phenidone 107-35-7, Taurine 110-17-8, Fumaric acid, biological studies 117-39-5, Quercetin 121-32-4, Ethyl vanillin 121-33-5, Vanillin 121-79-9, Propyl gallate 129-46-4, Sodium suramin 137-66-6, Ascorbyl palmitate 146-17-8, Riboflavin 5'-(dihydrogen phosphate) 153-18-4, Rutin 154-23-4, Catechin 156-54-7, Sodium butyrate 302-79-4, Retinoic acid 305-01-1, Esculetin 305-84-0, L-Carnosine 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 458-37-7, Curcumin 471-53-4, 18.beta.-Glycyrrhetic acid 476-66-4, Ellagic acid 500-38-9, Nordihydroguaiaretic acid 532-11-6, Anethole trithione 576-42-1 592-88-1, Diallyl sulfide 616-91-1, N-Acetyl-L-cysteine 622-78-6, Benzyl isothiocyanate 700-06-1, Indole-3-carbinol 1072-71-5, Bismuthiol I 2179-57-9, Diallyl disulfide 2257-09-2, Phenethyl isothiocyanate 2578-28-1, D,L-Selenomethionine 3211-76-5, L-Selenomethionine 3375-50-6, 2-Mercaptoethanesulfonic acid

5027-63-4,

Glucaro-1,4-lactone 5697-56-3, Carbenoxolone 5793-88-4, Calcium D-glucarate 5989-27-5, D-Limonene 6819-24-5, Palmitoyl carnitine hydrochloride 7235-40-7, .beta.,.beta.-Carotene 7631-95-0, Sodium molybdate 7772-98-7, Sodium thiosulfate 10102-18-8, Sodium selenite 10540-29-1, Tamoxifen 13410-01-0, Sodium selenate 14769-73-4, Levamisole 15687-27-1, Ibuprofen 17407-37-3, .alpha.-Tocopherol succinate 19750-45-9, 2-Oxothiazolidine-4-carboxylic acid 22916-47-8, Miconazole 25525-21-7, Glucaric acid 36322-90-4, Piroxicam 39746-25-3 52942-31-1, Etoperidone 55268-74-1, Praziquantel 64224-21-1, Oltipraz 65595-90-6, (N-6-Aminohexyl)-5-chloro-1-naphthalenesulfonamide 65646-68-6, N-(4-Hydroxyphenyl)retinamide 65666-07-1, Silymarin 70052-12-9 75078-91-0, Temarotene 75330-75-5, Lovastatin 75775-33-6, Purpurin 112859-71-9 160371-97-1, BASF 47851 160372-07-6, Ro 16-9100 160372-08-7, Ro 19-2968  
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(screening of potential chemopreventive agents using biochemical markers of carcinogenesis)

AN 1995:209906 CAPLUS

DN 122:71455

TI Screening of potential chemopreventive agents using biochemical markers of carcinogenesis

AU Sharma, Sheela; Stutzman, Jill D.; Kelloff, Gary J.; Steele, Vernon E.

CS Cell. Mol. Toxicol., ManTech Environ. Technol., Inc., Research Triangle Park, NC, 27709, USA

SO Cancer Res. (1994), 54(22), 5848-55

CODEN: CNREA8; ISSN: 0008-5472

DT Journal

LA English

L8 ANSWER 22 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS

AB Cancer chemoprevention is based on a number of experimental and epidemiological evidence that our environment could contain not only carcinogenic compounds but also natural or synthetic substances able to inhibit or reverse the process of carcinogenesis. More than 600 potential chemopreventives have been identified and approximately 30 of them have been or are being tested in humans. These include naturally occurring substances present in human foods and synthetic chemicals. In this review natural products possessing chemopreventive potential are introduced with experimental evidence of their mechanisms of action, although other natural chemopreventives are under investigation with regard to their spectra of activity and their possible relevance to prophylaxis of human cancer.

SO Oncology Reports, (1994) Vol. 1, No. 6, pp. 1139-1155.

IT Major Concepts

Nutrition; Oncology (Human Medicine, Medical Sciences)

IT Chemicals & Biochemicals

VITAMIN A; VITAMIN C; VITAMIN E

; FOLIC ACID; VITAMIN B12; SELENIUM; CALCIUM; VITAMIN

D3; MAGNESIUM HYDROXIDE; IRON; ZINC; COPPER; MOLYBDENUM;  
INDOLES; ISOTHIOCYANATES; THIOCYANATES; PROTEASE INHIBITORS

IT Miscellaneous Descriptors

ALLIUM COMPOUNDS; CALCIUM; CARCINOGENESIS; CAROTENOIDS; COPPER; DIET;  
DITHIOLETHIONES; FIBER; FLAVONOIDS; FOLIC ACID;  
GLUCOSINOLATES; INDOLES; IRON; ISOPRENOIDS; ISOTHIOCYANATES;  
MACRONUTRIENTS; MAGNESIUM HYDROXIDE; MICRONUTRIENTS; MOLYBDENUM;  
PHENOLS; PLANT STEROLS; PROTEASE INHIBITORS; SELENIUM; TERPENES;  
THIOCYANATES; VITAMIN A; VITAMIN B12; VITAMIN C;

VITAMIN D3; VITAMIN E; ZINC

RN 68-26-8Q (VITAMIN A)

11103-57-4Q (VITAMIN A)

50-81-7 (VITAMIN C)

1406-18-4 (VITAMIN E)

59-30-3 (FOLIC ACID)

68-19-9 (VITAMIN B12)

7782-49-2 (SELENIUM)

7440-70-2 (CALCIUM)

67-97-0 (VITAMIN D3)

1309-42-8 (MAGNESIUM HYDROXIDE)

7439-89-6 (IRON)

7440-66-6 (ZINC)

7440-50-8 (COPPER)

7439-98-7 (MOLYBDENUM)

120-72-9D (INDOLES)

71048-69-6D (ISOTHIOCYANATES)

302-04-5D (THIOCYANATES)

37205-61-1D (PROTEASE INHIBITORS)

AN 1995:111900 BIOSIS

DN PREV199598126200

TI Cancer chemoprevention by natural products (Review.

AU Tanaka, Takuji

CS First Dep. Pathol., Gifu Univ. Sch. Med., 40 Tsukasa-machi, Gifu City 500 Japan

SO Oncology Reports, (1994) Vol. 1, No. 6, pp. 1139-1155.

DT General Review

LA English

L8 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2001 ACS

AB In the NCI, Chemoprevention Branch drug development program, potential chemopreventive agents are evaluated for efficacy against chem. carcinogen-induced tumors in animal models. This paper summarizes the results of 144 agents in 352 tests using various animal efficacy models. Of these results, 146 were pos., representing 85 different agents. The target organs selected for the animals model are representative of high-incidence human cancers. The assays include inhibition of tumors induced by MNU in hamster trachea, DEN in hamster lung, AOM in rat colon (including inhibition of AOM-induced aberrant crypts), MAM in mouse colon,

DMBA and MNU in rat mammary glands, DMBA promoted by TPA in mouse skin, and OH-BBN in mouse bladder. The agents tested may be classified into various pharmacol. and chem. structural categories that are relevant to their chemopreventive potential. These categories include antiestrogens, antiinflammatories (e.g., NSAIDs), antioxidants, arachidonic acid metab. inhibitors, GST and GSH enhancers, ODC inhibitors, protein kinase C inhibitors, retinoids and carotenoids, organosulfur compds., calcium compds., vitamin D3 and analogs, and phenolic compds.

(e.g., flavonoids). The various categories of compds. have different spectra of efficacy in animal models. In hamster lung, GSH-enhancing agents and antioxidants appear to have high potential for inhibiting carcinogenesis. In the colon, NSAIDs and other antiinflammatory agents appear particularly promising. Likewise, NSAIDs are very active in mouse bladder. In rat mammary glands, retinoids and antiestrogens (as would be expected) are efficacious. Several of the chems. evaluated also appear to eb promising chemopreventive agents based on their activity in several of the animal models. Particularly, the ODC

inhibitor DFMO was active in the colon, mammary glands, the bladder models, while the dithiolthione, oltipraz, was efficacious in all the models listed above (i.e., lung, colon, mammary glands, skin, and bladder).

SO J. Cell. Biochem. (1994), (Suppl. 20), 32-54  
CODEN: JCEBD5; ISSN: 0730-2312

AB . . . acid metab. inhibitors, GST and GSH enhancers, ODC inhibitors, protein kinase C inhibitors, retinoids and carotenoids, organosulfur compds., calcium compds., **vitamin D3** and analogs, and phenolic compds. (e.g., **flavonoids**). The various categories of compds. have different spectra of efficacy in animal models. In hamster lung, GSH-enhancing agents and antioxidants. . .

IT 50-78-2, Aspirin 52-53-9, Verapamil 53-43-0, DHEA 53-86-1, Indomethacin 57-55-6, Propylene glycol, biological studies 57-83-0, Progesterone, biological studies 58-05-9, Folinic acid 58-27-5, Vitamin K3 58-32-2, Dipyridamole 58-55-9, Theophylline, biological studies 58-73-1, Diphenhydramine 58-95-7, **Vitamin E** Acetate 59-51-8, DL-Methionine 59-67-6, Nicotinic Acid, biological studies 60-54-8, Tetracycline 61-73-4, Methylene Blue 62-46-4, Thioctic Acid 67-73-2, Fluocinolone Acetonide 67-97-0, **Vitamin D3** 69-05-6, Quinacrine Hydrochloride 69-65-8, Mannitol 69-93-2, Uric Acid, biological studies 73-31-4, Melatonin 83-46-5, .beta.-Sitosterol 87-11-6, Thiolutin 99-73-0, 4-Bromophenacyl bromide 107-35-7, Taurine 110-17-8, Fumaric Acid, biological studies 113-92-8,  
Chlorpheniramine Maleate 117-39-5, **Quercetin** 121-32-4, Ethylvanillin 121-33-5, Vanillin 121-79-9, Propyl Gallate 125-84-8, Aminoglutethimide 137-66-6, Ascorbyl Palmitate 141-84-4, 2-Thioxo-4-thiazolidinone 145-63-1, Suramin 146-17-8, Riboflavin 5'-Phosphate 150-13-0, 4-Aminobenzoic Acid 150-76-5, 4-Methoxyphenol 153-18-4, **Rutin** 154-23-4, (+)-**Catechin** 156-54-7, Butyric Acid, Sodium Salt 156-57-0, 2-Mercaptoethylamine Hydrochloride 302-79-4, all-trans-Retinoic Acid 305-01-1, Esculetin 305-84-0, Carnosine 327-97-9, Chlorogenic Acid 331-39-5, Caffeic Acid 389-36-6, D-Glucaro-1,4-lactone 446-72-0, Genistein 458-37-7, Curcumin 471-34-1, Calcium Carbonate, biological studies 471-53-4, 18.beta.-Glycyrrhetic Acid 476-66-4, Ellagic Acid 480-16-0, **Morin** 486-12-4, Triprolidine 500-38-9, Nordihydroguaiaretic Acid 532-11-6, Anethole Trithione 566-48-3, 4-Hydroxyandrost-4-ene-3,17-dione 569-65-3, Meclizine 592-88-1, Diallyl Sulfide 599-79-1, Sulfasalazine 616-91-1, N-Acetyl-L-cysteine 622-78-6, Benzyl Isothiocyanate 624-49-7, Dimethyl Fumarate 700-06-1, Indole-3-carbinol 814-80-2, Calcium Lactate 1072-71-5, Bismuthiol I 1135-24-6, Ferulic Acid 2050-87-5, Diallyl Trisulfide 2179-57-9, Diallyl disulfide 2257-09-2, Phenethyl Isothiocyanate 3073-59-4, Hexamethylene Bisacetamide 3211-76-5, L-Selenomethionine 3766-08-3, d,l-Palmitoylcarnitine 4602-84-0, Farnesol 4759-48-2, 13-cis-Retinoic Acid 5300-03-8, 9-cis-Retinoic Acid 5697-56-3, Carbenoxolone 5989-27-5, d-Limonene 6385-02-0, Sodium Meclofenamate 7235-40-7, .beta.-Carotene 7631-95-0, Sodium Molybdate 7632-49-7, Calcium Glucarate 7757-93-9 7772-98-7, Sodium Thiosulfate 8050-81-5, Simethicone 9003-39-8, Polyvinylpyrrolidone 10043-52-4, Calcium Chloride, biological studies 10102-18-8, Sodium Selenite 10540-29-1, Tamoxifen 11103-57-4, Vitamin A 13410-01-0, Sodium Selenate 14306-25-3, Sodium Inositol Hexaphosphate 14769-73-4, Levamisole 15687-27-1, Ibuprofen 15826-37-6, Cromolyn Sodium 17211-15-3 19767-45-4, Sodium 2-Mercaptoethanesulfonate 19771-63-2, L-2-Oxothiazolidine-4-carboxylic acid 21593-77-1, S-Allyl-L-cysteine 22071-15-4, Ketoprofen 25013-16-5, Butylated Hydroxyanisole 25525-21-7, Glucaric Acid 25614-03-3, 2-Bromo-.alpha.-ergocryptine 28302-36-5, Sodium copper chlorophyllin 32042-43-6, DL-Arginine Hydrochloride 32222-06-3, Ro 21-5535 36322-90-4, Piroxicam 36439-43-7, D-Glucaric acid, potassium salt 37311-39-0, **Vitamin E** Succinate 38194-50-2, Sulindac 52942-31-1, Etoperidone

54965-24-1, Tamoxifen citrate 55268-74-1, Praziquantel 57817-89-7,  
Stevioside 61665-15-4, RU 16117 64224-21-1, Oltipraz 65646-68-6,  
4-HPR 65666-07-1, Silymarin 67037-37-0, DFMO 72629-69-7,  
Sarcophytol  
A 75078-91-0, Temarotene 75775-33-6, Purpurin 89778-26-7,  
Toremifene  
94497-51-5, Am 80 99519-84-3, CAI 102121-60-8, Am 580 110368-33-7,  
Ch 55 112859-71-9 118694-43-2, Ro 23-7553 124409-58-1, Ro 24-2637  
129731-10-8, (+)-Vorozole 133920-06-6, 6-Phenylhexyl Isothiocyanate  
137102-93-3, Ro 24-5531 160371-97-1, BASF-47851 160372-07-6, Ro  
16-9100 160372-08-7, Ro 19-2968  
RL: BAC (Biological activity or effector, except adverse); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(preclin. efficacy evaluation of potential cancer chemopreventive  
agents in animal carcinogenesis models)

AN 1995:491327 CAPLUS  
DN 122:281655  
TI Preclinical efficacy evaluation of potential chemopreventive agents in  
animal carcinogenesis models: methods and results from the NCI  
Chemoprevention Drug Development Program  
AU Steele, Vernon E.; Moon, Richard C.; Lubet, Ronald A.; Grubbs, Clinton  
J.;  
Reddy, Bandaru S.; Wargovich, Michael; McCormick, David L.; Pereira,  
Michael A.; Crowell, James A.; et al.  
CS DCPC, National Institutes of Health, Bethesda, MD, 20892, USA  
SO J. Cell. Biochem. (1994), (Suppl. 20), 32-54  
CODEN: JCEBD5; ISSN: 0730-2312  
DT Journal  
LA English

L8 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2001 ACS  
AB In vitro studies showed that several **flavonoids**, tannic acid,  
gallic acid and fat-sol. vitamins inhibited HeLa and Raji lymphoma cell  
growth. The inhibition trend exhibited by these compds. was similar for  
both cell lines, and their growth was inhibited dose dependently.  
Butein,  
(10 .mu.M), the most potent antiproliferative agent, exerted 30% growth  
inhibition and was more effective on HeLa cell.s. Retinol (100 .mu.M)  
inhibited cell proliferation completely. Tannic acid was twice as potent  
as its monomer gallic acid. From structure-activity consideration, the  
C2,3-double bond of the **flavonoid** mol. was important for  
activity. **Flavonoid** aglycons were more effective than their  
corresponding glycosides in suppressing cell growth.  
SO Cancer Lett. (Shannon, Irel.) (1992), 62(3), 217-24  
CODEN: CALEDQ; ISSN: 0304-3835  
AB In vitro studies showed that several **flavonoids**, tannic acid,  
gallic acid and fat-sol. vitamins inhibited HeLa and Raji lymphoma cell  
growth. The inhibition trend exhibited by these. . . completely.  
Tannic acid was twice as potent as its monomer gallic acid. From  
structure-activity consideration, the C2,3-double bond of the  
**flavonoid** mol. was important for activity. **Flavonoid**  
aglycons were more effective than their corresponding glycosides in  
suppressing cell growth.  
ST antitumor polyphenol vitamin plant **flavonoid** structure  
IT **Flavonoids**  
Tannins  
RL: PRP (Properties)  
(cytotoxic effects of, in HeLa and lymphoma cells, structure in  
relation to)  
IT Molecular structure-biological activity relationship  
(cytotoxic, of plant polyphenols and fat sol. vitamins and  
**flavonoids**)  
IT Molecular structure-biological activity relationship  
(neoplasm-inhibiting, of plant polyphenols and fat sol. vitamins and  
**flavonoids**)  
IT 59-02-9, .alpha.-Tocopherol 67-97-0, **Vitamin D3**

68-26-8, Retinol 84-80-0, Vitamin K1 117-39-5, Quercetin  
149-91-7, Gallic acid, biological studies 153-18-4, Rutin  
154-23-4, (+) Catechin 302-79-4, Retinoic acid 480-41-1  
487-52-5, Butein 491-70-3, Luteolin 10236-47-2, Naringin  
RL: PRP (Properties)  
(cytotoxic effects of, in HeLa and lymphoma cells, structure in  
relation to)

AN 1992:207337 CAPLUS

DN 116:207337

TI Cytotoxic effect of plant polyphenols and fat-soluble vitamins on  
malignant human cultured cells

AU Ramanathan, R.; Tan, C. H.; Das, N. P.

CS Fac. Med., Natl. Univ. Singapore, Singapore, 0511, Singapore

SO Cancer Lett. (Shannon, Irel.) (1992), 62(3), 217-24

CODEN: CALEDQ; ISSN: 0304-3835

DT Journal

LA English

L8 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2001 ACS

AB Medications are composed of at least one vasodilator or vasoprotector,  
and

at least one general or cerebral stimulant. These medications improve or  
protect cellular metab. by improving blow flow and stimulating  
assimilation of nutrients. Ginko biloba Leaf ext. 200 mg was combined  
with Eleutherococcus senticosus root ext. 125, China ginseng red root  
ext.

125, and vitamin C 50 mg were combined for daily  
administration.

PI FR 2583640 A1 19861226

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI FR 2583640 A1 19861226 FR 1985-9566 19850624 <--

AB . . . biloba Leaf ext. 200 mg was combined with Eleutherococcus  
senticosus root ext. 125, China ginseng red root ext. 125, and  
vitamin C 50 mg were combined for daily administration.

IT Appetite depressants

Nervous system stimulants

Amino acids, biological studies

Anthocyanins

Betaines

Enzymes

**Flavonoids**

Lecithins

Leucoanthocyanins

Phenols, biological studies

Vitamins

RL: BIOL (Biological study)

(medications contg., for stimulation of cellular metab.)

IT **Flavonoids**

RL: BIOL (Biological study)

(citro-, medications contg., for stimulation of cellular metab.)

IT 50-14-6, Vitamin D2 50-81-7, Vitamin C, biological  
studies 58-27-5, Vitamin K3 58-55-9, Theophyllin, biological studies  
58-74-2, Papaverin 58-85-5, Vitamin H 59-30-3, biological studies  
59-43-8, Vitamin B1, biological studies 59-46-1 59-67-6, biological  
studies 59-67-6D, derivs. 62-49-7 67-97-0, Vitamin  
D3 68-19-9, Vitamin B12 68-26-8, Vitamin A 73-24-5,  
biological studies 77-92-9, biological studies 79-83-4, Vitamin B5  
83-88-5, Vitamin G, biological studies 87-89-8, Inositol 90-39-1,  
Sparteine 91-64-5, Coumarin 94-25-7, Butoform 98-92-0 108-01-0,  
Deanol 118-92-3 153-18-4, Rutoside 300-62-9 314-35-2,

Etamiphyllin

472-11-7, Ruscogenin 480-17-1, Leucocyanidol 483-04-5, Raubasine  
520-26-3 541-15-1 546-63-4, Choline citrate 1406-16-2, Vitamin D  
1406-18-4, Vitamin E 1617-90-9, Vincamine  
2365-25-5, Pentamethonium 6805-41-0 7085-55-4, Troxerutin

8059-24-3,

Vitamin B6 8067-24-1, Dihydroergotoxin methanesulfonate 9005-49-6,  
Heparin, biological studies 11006-56-7 11032-41-0, Dihydroergotoxin  
11032-50-1, Vitamin PP 11096-55-2, Vitamin B9 11104-38-4, Vitamin K1  
17479-19-5 24292-52-2 25447-65-8 25447-66-9 31329-57-4,  
Naftidrofuryl 37470-13-6, Flavodic acid 52814-39-8 64060-35-1,  
Vitamin B8 106310-33-2 111214-33-6 111214-38-1 111214-91-6  
RL: BIOL (Biological study)  
(medications contg., for stimulation of cellular metab.)

AN 1987:605183 CAPLUS

DN 107:205183

TI Medications for improving blood flow and cellular metabolism

IN Berdal, Pascal

PA Fr.

SO Fr. Demande, 8 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2583640	A1	19861226	FR 1985-9566	19850624 <--

=> s vitamin D

L9 80699 VITAMIN D

=> s vitamin D3

L10 20496 VITAMIN D3

=> s vitamin A

2 FILES SEARCHED...

L11 74040 VITAMIN A

=> s vitamin E

L12 73703 VITAMIN E

=> s ascorbyl palmitate

L13 2239 ASCORBYL PALMITATE

=> s quercetin

L14 22209 QUERCETIN

=> s l10 and l11 and l12 and l13 and l14

L15 3 L10 AND L11 AND L12 AND L13 AND L14

=> d l15 1-3

L15 ANSWER 1 OF 3 USPATFULL

AN 1999:136718 USPATFULL

TI Modular system of dietary supplement compositions for optimizing health  
benefits and methods

IN Riley, Patricia A., Sunrise, FL, United States

PA Medical Doctors' Research Institute, Inc., Sunrise, FL, United States  
(U.S. corporation)

PI US 5976568 19991102

AI US 1997-803587 19970221 (8)

DT Utility

LN.CNT 1702

INCL INCLM: 424/451.000  
INCLS: 424/464.000  
NCL NCLM: 424/451.000  
NCLS: 424/464.000  
IC [6]  
ICM: A61K009-48  
EXF 424/451; 424/639; 424/641; 424/464; 424/655; 424/667; 424/682; 424/702;  
514/52; 514/276; 514/345; 514/356; 514/458; 514/474

L15 ANSWER 2 OF 3 USPATFULL  
AN 1999:106123 USPATFULL  
TI Acetylsalicylic acid and micronutrient supplementation for nutritional losses and coronary heart disease  
IN Riley, Patricia A., Sunrise, FL, United States  
Christakis, George, Sunrise, FL, United States  
PA Medical Doctor's Research Institute, Inc., Sunrise, FL, United States (U.S. corporation)  
PI US 5948443 19990907  
AI US 1997-804494 19970221 (8)  
DT Utility  
LN.CNT 1608  
INCL INCLM: 424/643.000  
INCLS: 424/195.100; 424/638.000; 424/648.000; 424/655.000; 424/656.000;  
424/687.000; 424/692.000; 514/052.000; 514/161.000; 514/162.000;  
514/163.000; 514/164.000; 514/165.000; 514/167.000; 514/168.000;  
514/249.000; 514/251.000; 514/276.000; 514/345.000; 514/356.000;  
514/387.000; 514/440.000; 514/456.000; 514/458.000; 514/474.000;  
514/494.000; 514/499.000; 514/500.000; 514/502.000; 514/505.000;  
514/556.000; 514/557.000; 514/561.000; 514/563.000; 514/578.000;  
514/678.000; 514/725.000; 514/729.000; 514/762.000; 514/904.000;  
514/905.000  
NCL NCLM: 424/643.000  
NCLS: 424/638.000; 424/648.000; 424/655.000; 424/656.000; 424/687.000;  
424/692.000; 424/729.000; 424/754.000; 424/766.000; 514/052.000;  
514/161.000; 514/162.000; 514/163.000; 514/164.000; 514/165.000;  
514/167.000; 514/168.000; 514/249.000; 514/251.000; 514/276.000;  
514/345.000; 514/356.000; 514/387.000; 514/440.000; 514/456.000;  
514/458.000; 514/474.000; 514/494.000; 514/499.000; 514/500.000;  
514/502.000; 514/505.000; 514/556.000; 514/557.000; 514/561.000;  
514/563.000; 514/578.000; 514/678.000; 514/725.000; 514/729.000;  
514/762.000; 514/904.000; 514/905.000  
IC [6]  
ICM: A61K033-32  
ICS: A61K031-62  
EXF 514/165; 514/904; 514/905; 514/52; 514/161; 514/162; 514/163; 514/164;  
514/167; 514/168; 514/249; 514/251; 514/276; 514/345; 514/356; 514/387;  
514/440; 514/456; 514/458; 514/474; 514/494; 514/499; 514/500; 514/502;  
514/505; 424/643; 424/195.1; 424/638; 424/648; 424/655; 424/656;  
424/687; 424/692  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2001 ACS  
AN 1995:491327 CAPLUS  
DN 122:281655  
TI Preclinical efficacy evaluation of potential chemopreventive agents in animal carcinogenesis models: methods and results from the NCI Chemoprevention Drug Development Program  
AU Steele, Vernon E.; Moon, Richard C.; Lubet, Ronald A.; Grubbs, Clinton J.;  
Reddy, Bandaru S.; Wargovich, Michael; McCormick, David L.; Pereira, Michael A.; Crowell, James A.; et al.  
CS DCPC, National Institutes of Health, Bethesda, MD, 20892, USA  
SO J. Cell. Biochem. (1994), (Suppl. 20), 32-54  
CODEN: JCEBD5; ISSN: 0730-2312  
DT Journal  
LA English

=> d 1-3 kwic

L15 ANSWER 1 OF 3 USPATFULL

SUMM . . . the absorption of iron, the presence of Vitamin D for the absorption of calcium, and the mutually protective effects of **vitamin A** and E. Another problem is that many of the multi-vitamin formulations today do not take into account the different dietary. . . many multi-vitamin formulations on the market are haphazardly self-designed to supply megadoses of potentially toxic amounts of nutrients, such as **vitamin A**, vitamin D, vitamin B6, iron, zinc and copper. Other commercially available vitamin formulations contain unnecessary and potentially allergic compounds, such. . .

SUMM . . . saturated fats, total fat, dietary cholesterol, sodium, and alcohol, as well as insufficient dietary fiber, potassium, iron and antioxidant micronutrients (**Vitamins A, C, E, selenium, zinc, carotenoids etc.**).

SUMM . . . it was discovered that the oxidation of LDL could be prevented significantly by micronutrient antioxidants such as beta carotene and **vitamin E**.

SUMM . . . aging process. Animal and human studies gave further impetus to these findings when it was shown that specific micronutrients, notably **vitamin E**, substantially blocked the induction of free radicals. Later, it was documented that lipid peroxidation formed free radicals with release of. . .

SUMM . . . in humans by significantly reducing diene formation. Mackness, M. I., et al. (1993) Biochem. J. 294 (Part 3): 829-834. Dietary **vitamin E** levels in the serum were studied in relation to in vitro oxidation of LDL and VLDL, and were found to. . .

SUMM . . . process including the effects of solar radiation, pollution and other toxicants. For example, vitamin C maintains healthy connective tissue, and **vitamin E**, and the carotenoids, especially lycopene, protect against ultraviolet radiation.

SUMM . . . diets can deplete minerals such as calcium, zinc and iron which are provided in the formula. Increasing intake of dietary **Vitamin E** and other polyunsaturates increases the need for antioxidants, these micronutrients are provided for in the formulation.

SUMM . . . servings of fruits and vegetables daily. Lack of host resistance increases the risk for cancer, thus acting as a promoter. **Vitamins A, B6, C, and E** and the minerals selenium and zinc in appropriate dosages can restore and maintain immunocompetence, and have. . .

SUMM . . . has the longest lifespan among Japanese, and Akita where the lifespan is much shorter, reveal that Okinawans' intake of antioxidants **vitamins A** and C, as well as the nutrients B1, B2, calcium and iron were significantly higher, while their carbohydrate and salt. . .

SUMM . . . the use of aspirin without interference by excessive dosages of nutrients which may contribute to decreased blood clotting, such as **vitamin E**. In addition, the Modular 1 composition contains appropriate levels of folic acid, vitamin B12 and vitamin B6 which reduce homocysteine. . .

SUMM . . . calcium absorption, Reynolds, J. et al., The Role of Vitamin D Metabolites In Bone Resorption. Calcification Tissue Res. 12:295-301, 1973; **Vitamin A** and E metabolically interact.

SUMM . . . the immune system. See Chandra, R. K. Excessive Intake of Zinc Impairs Immune Responses, JAMA 1984; 252:1443-6. High levels of

vitamin E and D decrease the activation of interleukin 2; thus, the formulations of the present invention do not use megadoses of. . .

SUMM . . . provides a modular supplement with all essential nutrients needed for the development and support of immune function including the B-vitamins, vitamins A, C, E, D and beta carotene, and appropriate levels of minerals such as selenium, magnesium, copper, iron, calcium and manganese.. . .

SUMM Modules 1, 2 and 3 provide a natural form of **vitamin E** (d-alpha tocopherol) which is 36% more active than a less expensive synthetic **vitamin E** (dl-alpha tocopherol) used in many formulas. This may be especially important for people at risk for recurrent infections. See Malkowska-Zwierz, . . .

SUMM The immune enhancing effect of **vitamin E** may be related to decreased lipid peroxidation products which occurs with **vitamin E** supplementation. See Meydani, S. N., Am. J. Clin. Nutr. 53(4):984, April 1991. The mineral selenium is crucial to the body's natural antioxidant enzyme system and works synergistically with **vitamin E**, both contributing to the maintenance of total immune system defenses. See Dhur, A., et al Comp. Biochem. Physiol. 96C Physio.. . .

SUMM **Vitamin A** in the formulas of the present invention modulate B-cell functions. See Blomhoff, H. R. et al. **Vitamin A** modulates B cell Function, Cell Growth and Cytokine Production, Journal of Biological Chemistry 267(33):23988-92, Nov. 25. 1992 Retinols are also a. . . Oxidative Defenses during Ascorbate Depletion of Healthy Men. AJCN 54 (6 Suppl):13025-1309 5, 1991. Young women supplemented with zinc and **vitamin A** exhibited higher proliferative responses of T lymphocytes on allergen challenge. It is therefore believed that zinc and **vitamin A** intake could result in health benefits for persons with suboptimal vitamin and mineral intake. See Kramer, T. R., Granulocyte Response in Children Supplemented With **Vitamin A** and Zinc. AJCN 58(4):566-70, Oct. 1993 Smokers require more vitamin C to maintain adequate plasma levels of this important antioxidant. . .

SUMM . . . nutritional status, associated disease, calorie intake, protein intake (including desirable ratio of essential to non-essential amino acids), and the micronutrients **vitamins A, C, E, B1, B2, zinc and iron**, all contribute to the healing process. For example, vitamin C is required for collagen synthesis, **vitamin A** for tissue epithelialization, and zinc for cellular mitosis and proliferation and as a cofactor in many protein synthesizing enzymes. See. . . trial of replacement antioxidant vitamin therapy for neutrophil locomotory dysfunction in blunt trauma. J. of Trauma, 31(8):1142-50, Aug. 1991, Verix **Vitamin E** Information Service. Post-operative oral multivitamin supplementation in a study of 140 patients also was found to be useful in correcting. . .

of Obesity, 15(10):661-7, Oct. 1991 Burned patients exhibit elevated levels of plasma lipid peroxidation products and reduced levels of serum **vitamin E** and total sulfhydryl group concentration. Increased oxygen free radical activity and activation of white blood cells and macrophages was also. . . Traber D L Gasser H. Redl H. Schlag G. Herndon D N. Free radical activity and loss of plasma antioxidants, **Vitamin E** and sulfhydryl groups in patients with burns: the 1993 Moyer Award. J. of Burn Care & Rehab. 14(6):602-9, 1993 Nov.-Dec.

SUMM . . . the endogenous antioxidant compounds ubiquitously found in the body, such as uric acid, are also protective. Dietary compounds such as **vitamins (A, C, E)** beta carotene, alpha carotene, lycopene, lutein, riboflavin, and minerals such as selenium and zinc are all part of. . .

SUMM It has been shown above that lack of host resistance increases the risk of cancer. **Vitamins A, B6, C, and E** and the minerals selenium and zinc, in dosages provided in the Module 1 and add-on formulations, . . .

SUMM Specific antioxidant micronutrients such as **vitamins E**, C, beta-carotene, selenium, copper, manganese, magnesium, folic acid, vitamin B6, and vitamin B12 and other nutritional compounds formulated into the . . .

SUMM . . . induce risks. It is known that aspirin taken with omega-3 fatty acid supplementation in humans prolongs bleeding time and that **vitamin E** with aspirin reduces the concentration of **vitamin E** needed to inhibit platelet aggregation. See Violi, et al, Atherosclerosis 82:247-252, 1990.

SUMM The bioflavonoid **quercetin** scavenges the superoxide anion radical directly and inhibits cyclooxygenase as does aspirin. See Chung-Kuo, Yao Li Hsueh, Pao Acta pharmacologica. . .

SUMM . . . gastrointestinal, cerebrovascular or renal bleeding can occur from all dose levels of aspirin intake. The formulation avoids high levels of **vitamin E** and fish oil found in some vitamin reparations that may produce excessive bleeding when combined with aspirin.

SUMM . . . lymphocyte functions by n-6 and n-3 polyinostriected fatty acids and acetylsalicylic acid. Ann Nutri. Metab. 1993, 37 (3) p. 146-59.

**Vitamin E** is required for the oxidation of long chain polyunsaturated fatty acids at the mitochondrial membranes, such as eicosanoids, the synthesis. . .

DETD . . . occur by the action of another micronutrient in the modular formulations, such as vitamins B6, or vitamin C, or or **vitamin E** by the special way the formula is taken in the AM and PM; or in the addition of the stress. . .

DETD The formulas avoid excessive beta carotene which may negatively affect the activity of alpha-tocopherol (**vitamin E**). This effect has been taken into account in the formulations by providing appropriate doses. The formulas utilize water soluble **vitamin E** which do not require dietary lipids for absorption. The inclusion of coenzyme Q-10, as a facilitator of **vitamin E**, and a ubiquitous intracellular antioxidant, which has recently been found to preserve myocardial function, is a useful and unique advantage. . . of excess copper in the formula helps prevent the negative effects of copper which can oppose the antioxidant action of **vitamin E**. The formulas may also contain capsicum or chili pepper to counteract aspirin's negative effects on prostaglandins. Alternately the aspirin or. . .

DETD . . . 10.0 to about 300 mcg  
Copper about 0.0 to about 4 mg  
Coenzyme Q-10 about 5.0 to about 300 mg  
**Vitamin A** about 200.0 to about 15,000 IU  
Beta Carotene about 500.0 to about 15,000 IU  
(Vit. A equivalent)  
Alpha Carotene about. . . to about 500 mcg  
Vitamin C about 20.0 to about 1,000 mg  
Vitamin D about 0.0 to about 400 IU  
**Vitamin E** about 5.0 to about 2,000 mg  
Grape Seed Extract about 0.0 to about 300 mg  
Green Tea Extract about 0.0. . .

DETD The formulas may contain other synergistic dietary or nutritional compounds such as garlic, bioflavonoids, **quercetin**, capsicum, boron, melatonin & DHEA. The formulas may also contain glycerol, sorbitol, sucrose, magnesium stearate and other excipients and binders..

DETD . . . bioequivalents) bioequivalents) aspirin (or its Zeaxanthin 20 mcg 5 mcg 20 mcg 50 mcg 200 mcg within within bioequivale nts)

**Vitamin A** 3,000 IU 2,000 IU 1,500 IU 200 IU 400 IU the  
AM the AM included Vitamin B1 (Thiamine HCl) 5. . . 6 mcg

Vitamin

C\* (Buffered Calcium Ascorbate, 150 mg 150 mg 600 mg 100 mg 200 mg  
Ascorbic Acid and **Ascorbyl Palmitate**)

**Vitamin D3** (Cholecalciferol) 300 IU 100 IU --

**Vitamin E** (d-alpha Tocopheryl Succinate) 60 IU 40 IU

30 IU 100 IU 200 IU Calcium (Carbonate, Ascorbate) 225 mg 275 mg. . .  
. mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg  
50 mg Green Tea Extract 25 mg 50 mg **Quercetin**  
50 mg 200 mg Hawthorne Berries\* (Flavones) 2 mg 5 mg Alpha  
Lipoic Acid 30 mg 100 mg

DETD 20 . . . bioequivalents) bioequivalents) aspirin (or its Zeaxanthin

mcg 5 mcg 20 mcg 50 mcg 200 mcg within within bioequivalents)

**Vitamin A** 3,000 IU 2,000 IU 1,500 IU 200 IU 400 IU the  
AM the AM included Vitamin B1 (Thiamine HCl) 4. . . 6 mcg

Vitamin

C\* (Buffered Calcium Ascorbate, 150 mg 100 mg 600 mg 100 mg 200 mg  
Ascorbic Acid and **Ascorbyl Palmitate**)

**Vitamin D3** (Cholecalciferol) 300 IU 100 IU --

**Vitamin E** (d-alpha Tocopheryl Succinate) 70 IU 30 IU

30 IU 100 IU 200 IU Calcium (Carbonate, Ascorbate) 200 mg 345 mg. . .  
. mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg  
50 mg Green Tea Extract 25 mg 50 mg **Quercetin**  
50 mg 200 mg Hawthorne Berries\* (Flavones) 2 mg 5 mg Alpha  
Lipoic Acid 30 mg 100 mg

CLM What is claimed is:

. . . 10.0 to about 300 mcg

Copper about 0.0 to about 4 mg

Coenzyme Q-10 about 5.0 to about 300 mg

**Vitamin A** about 200.0 to about 15,000 IU

Beta Carotene about 500.0 to about 15,000 IU

(Vit. A equivalent)

Alpha Carotene about. . . to about 500 mcg

Vitamin C about 20.0 to about 1,000 mg

Vitamin D about 0.0 to about 400 IU

**Vitamin E** about 5.0 to about 2,000 mg

Grape Seed Extract about 0.0 to about 300 mg

Green Tea Extract about 0.0. . .

. . . Copper; from about 5.0 to about 300 mg of Coenzyme Q.sub.10 ; from  
about 200.0 to about 15,000 IU of **Vitamin A**; from  
about 500.0 to about 15,000 IU of Beta Carotene; from about 50.0 to  
about 2,000 mcg of Alpha Carotene; . . . Vitamin C; from about 0.0 to  
about 400 IU of Vitamin D; from about 5.0 to about 2,000 mg of

**Vitamin E**; from about 0.0 to about 300 mg of Grape

Seed Extract; from about 0.0 to about 500 mg of Green. . . Alpha  
Lipoic Acid; from about 15.0 to about 1,000 mg of Taurine; from about  
0.0 to about 500 mg of **Quercetin**; and from about 0.0 to about  
500 mg of odorless Garlic.

. . . Carotene, about 400 mcg of Lutein, about 400 mcg of Lycopene, about  
20 mcg of Zeaxanthin, about 3000 IU of **Vitamin A**,  
from about 4 to about 5 mg of Vitamin B.sub.1, about 5 mg of Vitamin  
B.sub.2, about 33 mg of. . . about 150 mg of Vitamin C, about 300 IU  
of Vitamin D.sub.3, from about 60 to about 70 IU of **Vitamin**

**E**, from about 200 to about 225 mg of Calcium, about 80 mcg of  
Chromium, about 0.5 mg of Copper, from. . . Carotene, about 100 mcg  
of Lutein, about 100 mcg of Lycopene, about 5 mcg of Zeaxanthin, about  
2000 IU of **Vitamin A**, from about 2 to about 3 mg of  
Vitamin B.sub.1, about 2 mg of Vitamin B.sub.2, about 7 mg of. . .  
about 150 mg of Vitamin C, about 100 IU of Vitamin D.sub.3, from about  
30 to about 40 IU of **Vitamin E**, from about 275 to  
about 345 mg of Calcium, about 20 mcg of Chromium, about 0.5 mg of  
Copper, from. . .

. . . Carotene, about 400 mcg of Lutein, about 400 mcg of Lycopene, about

20 mcg of Zeaxanthin, about 1,5000 IU of Vitamin A,  
about 7.5 mg of Vitamin B.sub.1, about 12.5 mg of Vitamin B.sub.2,  
about 40 mg of Niacinamide, about 10 mg. . . 300 mcg of Biotin, about 6  
mcg of Vitamin B.sub.12, about 600 mg of Vitamin C, about 30 IU of  
Vitamin E, about 450 mg of Calcium, about 70 mcg of  
Chromium, about 0.5 mg of Copper, about 3 mg of Iron, . . .  
. . . mcg of Lycopene, from about 50 to about 200 mcg of Zeaxanthin, from  
about 200 to about 400 IU of Vitamin A, from about 1  
to about 2 mg of Vitamin B.sub.1, from about 1 to about 2 mg of Vitamin  
B.sub.2, . . . Vitamin B.sub.12, from about 100 to about 200 mg of  
Vitamin C, from about 100 to about 200 IU of Vitamin E  
, from about 15 to about 25 mcg of Chromium, from about 25 to about 50  
mg of Magnesium, from about . . . Extract, from about 25 to about 50  
mg of Green Tea Extract, from about 50 to about 200 mg of  
**Quercetin**, from about 2 to about 5 mg of Hawthorne Berries, and  
from about 30 to about 100 mg of Alpha. . .

L15 ANSWER 2 OF 3 USPATFULL

SUMM . . . the absorption of iron, the presence of Vitamin D for the absorption of calcium, and the mutually protective effects of **vitamin A** and **E**. Another problem is that many of the multi-vitamin formulations today do not take into account the different dietary. . . many multi-vitamin formulations on the market are haphazardly self-designed to supply megadoses of potentially toxic amounts of nutrients, such as **vitamin A**, **vitamin D**, **vitamin B6**, iron, zinc and copper. Other commercially available vitamin formulations contain unnecessary and potentially allergic compounds, such. . .

SUMM . . . saturated fats, total fat, dietary cholesterol, sodium, and alcohol, as well as insufficient dietary fiber, potassium, iron and antioxidant micronutrients (**Vitamins A, C, E, selenium, zinc, carotenoids etc.**).

SUMM . . . it was discovered that the oxidation of LDL could be prevented significantly by micronutrient antioxidants such as beta carotene and **vitamin E**.

SUMM . . . aging process. Animal and human studies gave further impetus to these findings when it was shown that specific micronutrients, notably **vitamin E**, substantially blocked the induction of free radicals. Later, it was documented that lipid peroxidation formed free radicals with release of. . .

SUMM . . . in humans by significantly reducing diene formation. Mackness, M. I., et al. (1993) Biochem. J. 294 (Part 3): 829-834. Dietary **vitamin E** levels in the serum were studied in relation to in vitro oxidation of LDL and VLDL, and were found to. . .

SUMM and . . . process including the effects of solar radiation, pollution other toxicants. For example, **vitamin C** maintains healthy connective tissue, and **vitamin E**, and the carotenoids, especially lycopene, protect against ultraviolet radiation.

SUMM which . . . diets can deplete minerals such as calcium, zinc and iron are provided in the formula. Increasing intake of dietary **Vitamin E** and other polyunsaturates increases the need for antioxidants, these micronutrients are provided for in the formulation.

SUMM . . . servings of fruits and vegetables daily. Lack of host resistance increases the risk for cancer, thus acting as a promoter. **Vitamins A, B6, C, and E** and the minerals selenium and zinc in appropriate dosages can restore and maintain immunocompetence, and have. . .

SUMM . . . has the longest lifespan among Japanese, and Akita where the lifespan is much shorter, reveal that Okinawans' intake of antioxidants **vitamins A** and **C**, as well as the nutrients **B1, B2**,

calcium and iron were significantly higher, while their carbohydrate and salt. . . .

SUMM . . . the use of aspirin without interference by excessive dosages of nutrients which may contribute to decreased blood clotting, such as **vitamin E**. In addition, the Modular 1 composition contains appropriate levels of folic acid, vitamin B12 and vitamin B6 which reduce homocysteine. . . .

SUMM . . . calcium absorption, Reynolds, J. et al.,: The Role of Vitamin D Metabolites In Bone Resorption. Calcification Tissue Res. 12:295-301, 1973; **Vitamin A** and E metabolically interact.

SUMM . . . the immune system. See Chandra, R. K Excessive Intake of Zinc Impairs Immune Responses, JAMA 1984; 252:1443-6. High levels of **vitamin E** and D decrease the activation of interleukin 2; thus, the formulations of the present invention do not use megadoses of. . . .

SUMM . . . provides a modular supplement with all essential nutrients needed for the development and support of immune function including the B-vitamins, **vitamins A, C, E, D** and beta carotene, and appropriate levels of minerals such as selenium, magnesium, copper, iron, calcium and manganese. . . .

SUMM Modules 1, 2 and 3 provide a natural form of **vitamin E** (d-alpha tocopherol) which is 36% more active than a less expensive synthetic **vitamin E** (dl-alpha tocoperol) used in many formulas. This may be especially important for people at risk for recurrent infections. See Malkowska-Zwierz, . . . .

SUMM The immune enhancing effect of **vitamin E** may be related to decreased lipid peroxidation products which occurs with **vitamin E** supplementation. See Meydani, S. N., Am J. Clin. Nutr. 53(4): 984, April 1991. The mineral selenium is crucial to the body's natural antioxidant enzyme system and works synergistically with **vitamin E**, both contributing to the maintenance of total immune system defenses. See Dhur, A., et al Comp. Biochem Physiol. 96C (2):. . . .

SUMM **Vitamin A** in the formulas of the present invention modulate B-cell functions. See Blomhoff, H. R. et al. **Vitamin A** is a Key Regulator for Cell Growth, Cytokine Production, and Differentiation in Normal B Cells, Journal of Biological Chemistry 267(33):23988-92, . . . and Oxidant Defense during Ascorbate Depletion of Healthy Men. AJCN 54 (6 Suppl):1302S-1309S, 1991. Young women supplemented with zinc and **vitamin A** exhibited higher proliferative responses of T lymphocytes on allergen challenge. It is therefore believed that zinc and **vitamin A** intake could result in health benefits for persons with suboptimal vitamin and mineral intake. See Kramer, T. R. et al. Lymphocyte Responsiveness of Children Supplemented With **Vitamin A** and Zinc. AJCN 58(4):566-70, October 1993. Smokers require more vitamin C to maintain adequate plasma levels of this important antioxidant. . . .

SUMM . . . nutritional status, associated disease, calorie intake, protein intake (including desirable ratio of essential to non-essential amino acids), and the micronutrients **vitamins A, C, E, B1, B2**, zinc and iron, all contribute to the healing process. For example, vitamin C is required for collagen synthesis, **vitamin A** for tissue epithelization, and zinc for cellular mitosis and proliferation and as a cofactor in many protein synthesizing enzymes. See. . . . trial of replacement antioxidant vitamin therapy for neutrophil locomotory dysfunction in blunt trauma. J. of Trauma, 31(8):1142-50, August 1991, Verix **Vitamin E** Information Service. Post-operative oral multivitamin supplementation in a study of 140 patients also was found to be useful in correcting. . . .

of Obesity, 15(10):661-7, October 1991. Burned patients exhibit elevated levels of plasma lipid peroxidation products and reduced levels of serum **vitamin E** and total sulfhydryl group concentration. Increased oxygen free radical activity and activation of white blood cells and macrophages was also. . . Cox CS. Traber DL Gasser H. Redl H. Schlag G. Herndon DN. Free radical activity and loss of plasma antioxidants, **Vitamin E** and sulfhydryl groups in patients with burns: the 1993 Moyer Award. J. Burn Care Rehabil. 14(6):602-9, November-December 1993.

SUMM . . . the endogenous antioxidant compounds ubiquitously found in the body, such as uric acid, are also protective. Dietary compounds such as **vitamins (A, C, E)** beta carotene, alpha carotene, lycopene, lutein, riboflavin, and minerals such as selenium and zinc are all part of. . .

SUMM It has been shown above that lack of host resistance increases the risk of cancer. **Vitamins A, B6, C, and E** and the minerals selenium and zinc, in dosages provided in the Module 1 and add-on formulations, . . .

SUMM Specific antioxidant micronutrients such as **vitamins E**, C, beta-carotene, selenium, copper, manganese, magnesium, folic acid, vitamin B6, and vitamin B12 and other nutritional compounds formulated into the. . .

SUMM . . . induce risks. It is known that aspirin taken with omega-3 fatty acid supplementation in humans prolongs bleeding time and that **vitamin E** with aspirin reduces the concentration of **vitamin E** needed to inhibit platelet aggregation. See Violi, et al, Atherosclerosis 82:247-252, 1990.

SUMM The bioflavonoid **quercetin** scavenges the superoxide anion radical directly and inhibits cyclooxygenase as does aspirin. See Gu Zhen-Lun et al., Acta pharmacologica Sinica. . .

SUMM . . . gastrointestinal, cerebrovascular or renal bleeding can occur from all dose levels of aspirin intake. The formulation avoids high levels of **vitamin E** and fish oil found in some vitamin preparations that may produce excessive bleeding when combined with aspirin.

SUMM . . . human lymphocyte function by n-6 and n-3 polyunsaturated fatty acids and acetylsalicylic acid. Ann Nutri. Metab. 1993, 37 (3) p.146-59.

Vitamin E is required for the oxidation of long chain polyunsaturated fatty acids at the mitochondrial membranes, such as eicosanoids, the synthesis. . .

DETD . . . may occur by the action of another micronutrient in the modular formulations, such as vitamins B6, or vitamin C, or **vitamin E** by the special way the formula is taken in the AM and PM; or in the addition of the stress. . .

DETD . . . aspirin to produce potentially toxic compounds. The formulas avoid excessive beta carotene which may negatively affect the activity of alpha-tocopherol (**vitamin E**). This effect has been taken into account in the formulations by providing appropriate doses. The formulas utilize water soluble **vitamin E** which do not require dietary lipids for absorption. The inclusion of coenzyme Q-10, as a facilitator of **vitamin E**, and a ubiquitous intracellular antioxidant, which has recently been found to preserve myocardial function, is a useful and unique advantage. . . of excess copper in the formula helps prevent the negative effects of copper which can oppose the antioxidant action of **vitamin E**. The formulas may also contain capsicum or chili pepper to counteract aspirin's negative effects on prostaglandins. Alternately the aspirin or. . .

DETD . . . 200 mcg

Chromium about 10.0 to about 300 mcg  
Copper about 0.0 to about 4 mg  
Coenzyme Q-10 about 5.0 to about 300 mg  
**Vitamin A** about 200.0 to about 15,000 IU  
Beta Carotene about 500.0 to about 15,000 IU  
(Vit. A equivalent)  
Alpha Carotene about 50.0 to about . . . mcg  
Zeaxanthin about 5.0 to about 500 mcg  
Vitamin C about 20.0 to about 1,000 mg  
Vitamin D about 0.0 to about 400 IU  
**Vitamin E** about 5.0 to about 2,000 mg  
Grape Seed Extract about 0.0 to about 300 mg  
Green Tea Extract about 0.0 to about . . .  
DETD The formulas may contain other synergistic dietary or nutritional compounds such as garlic, bioflavonoids, **quercetin**, capsicum, boron, melatonin & DHEA. The formulas may also contain glycerol, sorbitol, sucrose, magnesium stearate and other excipients and binders..  
DET . . . its bioequi- aspirin (or its Zeaxanthin 20 mcg 5 mcg 20 mcg 50 mcg 200 mcg valents) within valents) bioequivalents)  
**Vitamin A** 3,000 IU 2,000 IU 1,500 IU 200 IU 400 IU the AM within the AM included Vitamin B1 (Thiamine HCl). . . 6 mcg  
Vitamin C\* (Buffered Calcium Ascorbate, 150 mg 150 mg 600 mg 100 mg 200 mg Ascorbic Acid and **Ascorbyl Palmitate**)  
**Vitamin D3** (Cholecalciferol) 300 IU 100 IU --  
**Vitamin E** (d-alpha Tocopheryl Succinate) 60 IU 40 IU 30 IU 100 IU 200 IU Calcium (Carbonate, Ascorbate) 225 mg 275 mg. . .  
mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg  
Green Tea Extract 25 mg 50 mg **Quercetin** 50 mg 200 mg  
Hawthorne Berries\* (Flavones) 2 mg 5 mg Alpha Lipoic Acid 30 mg 100 mg  
DETD . . . its bioequi- aspirin (or its Zeaxanthin 20 mcg 5 mcg 20 mcg 50 mcg 200 mcg valents) within valents) bioequivalents)  
**Vitamin A** 3,000 IU 2,000 IU 1,500 IU 200 IU 400 IU the AM within the AM included Vitamin B1 (Thiamine HCl). . . 6 mcg  
Vitamin C\* (Buffered Calcium Ascorbate, 150 mg 100 mg 600 mg 100 mg 200 mg Ascorbic Acid and **Ascorbyl Palmitate**)  
**Vitamin D3** (Cholecalciferol) 300 IU 100 IU --  
**Vitamin E** (d-alpha Tocopheryl Succinate) 70 IU 30 IU 30 IU 100 IU 200 IU Calcium (Carbonate, Ascorbate) 200 mg 345 mg. . .  
mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg  
Green Tea Extract 25 mg 50 mg **Quercetin** 50 mg 200 mg  
Hawthorne Berries\* (Flavones) 2 mg 5 mg Alpha Lipoic Acid 30 mg 100 mg  
CLM What is claimed is:  
. . . 200 mcg  
Chromium about 10.0 to about 300 mcg  
Copper about 0.0 to about 4 mg  
Coenzyme Q-10 about 5.0 to about 300 mg  
**Vitamin A** about 200.0 to about 15,000 IU  
Beta Carotene about 500.0 to about 15,000 IU  
Alpha Carotene about 50.0 to about 2,000 mcg  
Lycopene. . . mcg  
Zeaxanthin about 5.0 to about 500 mcg  
Vitamin C about 20.0 to about 1,000 mg  
Vitamin D about 0.0 to about 400 IU  
**Vitamin E** about 5.0 to about 2,000 mg

Grape Seed Extract

about 0.0 to about 300 mg

Green Tea Extract

about 0.0 to about. . .

L15 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2001 ACS

AB . . . acid metab. inhibitors, GST and GSH enhancers, ODC inhibitors, protein kinase C inhibitors, retinoids and carotenoids, organosulfur compds., calcium compds., **vitamin D3** and analogs, and phenolic compds. (e.g., flavonoids). The various categories of compds. have different spectra of efficacy in animal models.. . .

IT 50-78-2, Aspirin 52-53-9, Verapamil 53-43-0, DHEA 53-86-1, Indomethacin 57-55-6, Propylene glycol, biological studies 57-83-0, Progesterone, biological studies 58-05-9, Folinic acid 58-27-5, Vitamin K3 58-32-2, Dipyridamole 58-55-9, Theophylline, biological studies 58-73-1, Diphenhydramine 58-95-7, **Vitamin E** Acetate 59-51-8, DL-Methionine 59-67-6, Nicotinic Acid, biological studies 60-54-8, Tetracycline 61-73-4, Methylene Blue 62-46-4, Thioctic Acid 67-73-2, Fluocinolone Acetonide 67-97-0, **Vitamin D3** 69-05-6, Quinacrine Hydrochloride 69-65-8, Mannitol 69-93-2, Uric Acid, biological studies 73-31-4, Melatonin 83-46-5, .beta.-Sitosterol 87-11-6, Thiolutin 99-73-0, 4-Bromophenacyl bromide 107-35-7, Taurine 110-17-8, Fumaric Acid, biological studies

113-92-8,

Chlorpheniramine Maleate 117-39-5, **Quercetin** 121-32-4, Ethylvanillin 121-33-5, Vanillin 121-79-9, Propyl Gallate 125-84-8, Aminoglutethimide 137-66-6, **Ascorbyl Palmitate** 141-84-4, 2-Thioxo-4-thiazolidinone 145-63-1, Suramin 146-17-8, Riboflavin 5'-Phosphate 150-13-0, 4-Aminobenzoic Acid 150-76-5, 4-Methoxyphenol 153-18-4, Rutin 154-23-4, (+)-Catechin 156-54-7, Butyric Acid, Sodium Salt 156-57-0, 2-Mercaptoethylamine Hydrochloride 302-79-4, all-trans-Retinoic Acid 305-01-1, Esculetin 305-84-0, Carnosine 327-97-9, Chlorogenic Acid 331-39-5, Caffeic Acid 389-36-6, D-Glucaro-1,4-lactone 446-72-0, Genistein 458-37-7,

Curcumin

471-34-1, Calcium Carbonate, biological studies 471-53-4, 18.beta.-Glycyrrhetic Acid 476-66-4, Ellagic Acid 480-16-0, Morin 486-12-4, Triprolidine 500-38-9, Nordihydroguaiaretic Acid 532-11-6, Anethole Thione 566-48-3, 4-Hydroxyandrost-4-ene-3,17-dione 569-65-3, Meclizine 592-88-1, Diallyl Sulfide 599-79-1, Sulfasalazine 616-91-1, N-Acetyl-L-cysteine 622-78-6, Benzyl Isothiocyanate 624-49-7, Dimethyl Fumarate 700-06-1, Indole-3-carbinol 814-80-2, Calcium Lactate 1072-71-5, Bismuthiol I 1135-24-6, Ferulic Acid 2050-87-5, Diallyl Trisulfide 2179-57-9, Diallyl disulfide 2257-09-2, Phenethyl Isothiocyanate 3073-59-4, Hexamethylene Bisacetamide 3211-76-5, L-Selenomethionine 3766-08-3, d,L-Palmitoylcarnitine 4602-84-0, Farnesol 4759-48-2, 13-cis-Retinoic Acid 5300-03-8, 9-cis-Retinoic Acid 5697-56-3, Carbenoxolone 5989-27-5, d-Limonene 6385-02-0, Sodium Meclofenamate 7235-40-7, .beta.-Carotene 7631-95-0, Sodium Molybdate 7632-49-7, Calcium Glucarate 7757-93-9 7772-98-7, Sodium Thiosulfate 8050-81-5, Simethicone 9003-39-8, Polyvinylpyrrolidone 10043-52-4, Calcium Chloride, biological studies 10102-18-8, Sodium Selenite 10540-29-1, Tamoxifen 11103-57-4, **Vitamin A** 13410-01-0, Sodium Selenate 14306-25-3, Sodium Inositol Hexaphosphate 14769-73-4, Levamisole 15687-27-1, Ibuprofen 15826-37-6, Cromolyn Sodium 17211-15-3 19767-45-4, Sodium 2-Mercaptoethanesulfonate 19771-63-2, L-2-Oxothiazolidine-4-carboxylic acid 21593-77-1, S-Allyl-L-cysteine 22071-15-4, Ketoprofen 25013-16-5, Butylated Hydroxyanisole 25525-21-7, Glucaric Acid 25614-03-3, 2-Bromo-.alpha.-ergocryptine 28302-36-5, Sodium copper chlorophyllin 32042-43-6, DL-Arginine Hydrochloride 32222-06-3, Ro 21-5535 36322-90-4, Piroxicam 36439-43-7, D-Glucaric acid, potassium salt 37311-39-0, **Vitamin E** Succinate 38194-50-2, Sulindac 52942-31-1, Etoperidone 54965-24-1, Tamoxifen citrate 55268-74-1, Praziquantel 57817-89-7, Stevioside 61665-15-4, RU 16117 64224-21-1, Oltipraz 65646-68-6, 4-HPR 65666-07-1, Silymarin

67037-37-0, DFMO 72629-69-7, Sarcophytol A 75078-91-0, Temarotene  
75775-33-6, Purpurin 89778-26-7, Toremifene 94497-51-5, Am 80  
99519-84-3, CAI 102121-60-8, Am 580 110368-33-7, Ch 55 112859-71-9  
118694-43-2, Ro 23-7553 124409-58-1, Ro 24-2637 129731-10-8,  
(+)-Vorozole 133920-06-6, 6-Phenylhexyl Isothiocyanate 137102-93-3,

Ro

24-5531 160371-97-1, BASF-47851 160372-07-6, Ro 16-9100

160372-08-7,

Ro 19-2968

RL: BAC (Biological activity or effector, except adverse); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)

(preclin. efficacy evaluation of potential cancer chemopreventive  
agents in animal carcinogenesis models)

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2001 ACS  
 AN 2000:568528 CAPLUS  
 DN 133:168395  
 TI Orally ingested compositions for prevention and treatment of age-related eye disorders  
 IN Gorsek, Wayne F.  
 PA Vitacost Inc., USA  
 SO U.S., 3 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6103756	A	20000815	US 1999-372055	19990811

RE.CNT 1  
 RE  
 (1) Helberg; US 5688828 1997 CAPLUS

=> d 2-3

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2001 ACS  
 AN 1999:595013 CAPLUS  
 DN 131:219213  
 TI Disposable absorbent article having a skin care composition containing an enzyme inhibitor  
 IN Roe, Donald Carroll; Rourke, Francis James; Osborne, Scott Edward  
 PA The Procter & Gamble Company, USA  
 SO PCT Int. Appl., 73 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9945973	A1	19990916	WO 1999-US5311	19990311
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9930795	A1	19990927	AU 1999-30795	19990311
BR 9908565	A	20001212	BR 1999-8565	19990311
EP 1061962	A1	20001227	EP 1999-912417	19990311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
PRAI US 1998-41266	A	19980312		
WO 1999-US5311	W	19990311		

RE.CNT 8  
 RE  
 (1) Ampulski, R; US 5059282 A 1991 CAPLUS  
 (2) Buckingham, K; US 4556560 A 1985 CAPLUS  
 (3) Enviroderm Pharmaceuticals Inc; WO 9738735 A 1997 CAPLUS  
 (4) Fort James Corp; EP 0875233 A 1998 CAPLUS

(5) Katsuhiro, I; US 5376655 A 1994 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 3 USPATFULL  
AN 2000:105939 USPATFULL  
TI Ocular orally ingested composition for prevention and treatment of  
individuals  
IN Gorsek, Wayne F., Springfield, IL, United States  
PA VitaCost Inc., Springfield, IL, United States (U.S. corporation)  
PI US 6103756 20000815  
AI US 1999-372055 19990811 (9)  
DT Utility  
LN.CNT 133  
INCL INCLM: 514/458.000  
INCLS: 514/474.000; 514/725.000; 514/912.000; 514/913.000  
NCL NCLM: 514/458.000  
NCLS: 514/474.000; 514/725.000; 514/912.000; 514/913.000  
IC [7]  
ICM: A61K031-355  
ICS: A61K031-07  
EXF 514/458; 514/474; 514/725; 514/912; 514/913  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Trying 3106016892...Open

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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
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Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details.

Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> S VITAMIN d3  
1316 VITAMIN  
3 VITAMINS  
1318 VITAMIN  
(VITAMIN OR VITAMINS)  
24336 D3  
307 VITAMIN D3  
(VITAMIN(W) D3)  
L1

=> S VITAMIN D3/CN  
L2 1 VITAMIN D3/CN

=> D L2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS  
RN 67-97-0 REGISTRY

CN 9,10-Secocolesterol-5,7,10(19)-trien-3-ol, (3.β.,5Z,7E)- (9CI) (CA INDEX)

NAME )

OTHER CA INDEX NAMES:

**CN Cholecalciferol (8CI)**

**OTHER NAMES:**

CN 9,10-Se

CN Arachitol

ON INGENIERO

CN Calciol  
 CN Colecalciferol  
 CN D3-Vigantol  
 CN Delsterol  
 CN Deparal  
 CN FeraCol  
 CN Granuvit D3  
 CN Oleovitamin D3  
 CN Quintox  
 CN Ricketon  
 CN Trivitan  
 CN Vi-De3  
 CN Videkhol  
 CN Vigorsan  
 CN **Vitamin D3**  
 CN Vitinc Dan-Dee-3  
 FS STEREOSEARCH  
 DR 8024-19-9, 8050-67-7  
 MF C27 H44 O  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS,  
 BIOSIS,  
 BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,  
 CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*,  
 DIOGENES, DRUGU, EMBASE, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA,  
 MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHARMASEARCH, PROMT,  
 RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TOXLIT, USAN, USPAT2,  
 USPATFULL,  
 VETU

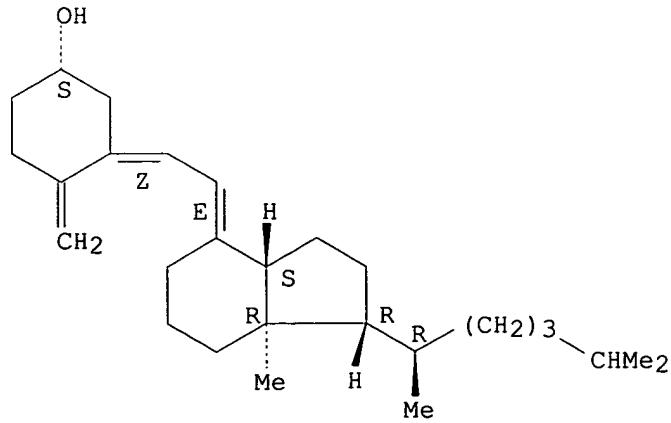
(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4333 REFERENCES IN FILE CA (1967 TO DATE)

447 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

4340 REFERENCES IN FILE CAPLUS (1967 TO DATE)

5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

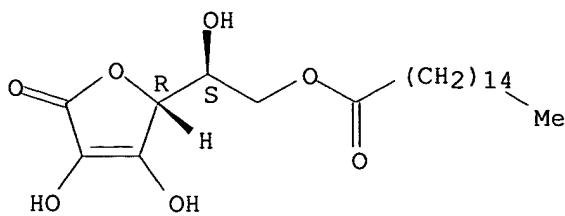
=> S ASCORBYL PALMITATE  
59 ASCORBYL  
1374 PALMITATE  
5 PALMITATES  
1374 PALMITATE  
(PALMITATE OR PALMITATES)  
L3 14 ASCORBYL PALMITATE  
(ASCORBYL(W) PALMITATE)

=> S ASCORBYL PALMITATE/CN  
L4 1 ASCORBYL PALMITATE/CN

=> D L4

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS  
RN 137-66-6 REGISTRY  
CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN L-Ascorbic acid, 6-palmitate (8CI)  
CN Palmitic acid, 6-ester with ascorbic acid (6CI, 7CI)  
OTHER NAMES:  
CN 6-Hexadecanoyl-L-ascorbic acid  
CN 6-Monopalmitoyl-L-ascorbate  
CN 6-O-Palmitoyl-L-ascorbic acid  
CN 6-O-Palmitoyl-L-ascorbic acid  
CN 6-O-Palmitoylascorbic acid  
CN 6-Palmitate-L-ascorbic acid  
CN 6-Palmitoylascorbic acid  
CN Ascorbic acid 6-palmitate  
CN Ascorbic acid palmitate  
CN Ascorbic palmitate  
CN Ascorboyl palmitate  
CN Ascorbyl 6-palmitate  
CN Ascorbyl monopalmitate  
CN **Ascorbyl palmitate**  
CN Ascorbylpalmitic acid  
CN Cetyl ascorbate  
CN L-Ascorbyl 6-palmitate  
CN L-Ascorbyl monopalmitate  
CN L-Ascorbyl palmitate  
CN Ondascora  
CN Palmitoyl L-ascorbic acid  
CN Quicifal  
FS STEREOSEARCH  
DR 162872-43-7, 57233-83-7, 120398-58-5  
MF C22 H38 O7  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,  
CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT,  
IFIUDB, IPA, MEDLINE, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, RTECS\*,  
SPECINFO, TOXCENTER, TOXLIT, USAN, USPAT2, USPATFULL, VETU  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

869 REFERENCES IN FILE CA (1967 TO DATE)  
 9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 875 REFERENCES IN FILE CAPLUS (1967 TO DATE).  
 32 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

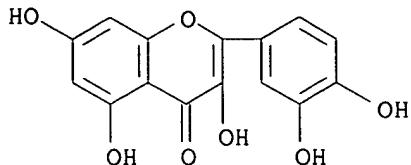
=> S QUERCETIN  
 L5 319 QUERCETIN

=> S QUERCETIN/CN  
 L6 1 QUERCETIN/CN

=> D L6

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS  
 RN 117-39-5 REGISTRY  
 CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy- (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Flavone, 3,3',4',5,7-pentahydroxy- (7CI, 8CI)  
 CN Flavone, 3,4',5,5',7-pentahydroxy- (6CI)  
 OTHER NAMES:  
 CN 3,3',4',5,7-Pentahydroxyflavone  
 CN 3,5,7,3',4'-Pentahydroxyflavone  
 CN C.I. 75670  
 CN C.I. Natural Yellow 10  
 CN Cyanidelonon 1522  
 CN Meletin  
 CN **Quercetin**  
 CN Quercetine  
 CN Quercetol  
 CN Quercitin  
 CN Quertin  
 CN Quertine  
 CN Sophoretin  
 CN Xanthaurine  
 FS 3D CONCORD  
 DR 73123-10-1, 74893-81-5  
 MF C15 H10 O7  
 CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*,  
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS,  
 CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU,  
 DETHERM\*, DIOGENES, DRUGU, EMBASE, HODOC\*, HSDB\*, IFICDB, IFIPAT,  
 IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PIRA,  
 PROMT, RTECS\*, SPECINFO, TOXCENTER, TOXLIT, TULSA, USPATFULL, VETU  
 (\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

6981 REFERENCES IN FILE CA (1967 TO DATE)  
543 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
6994 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> FILE EMBASE BIOSIS MEDLINE CAPLUS USPATFULL COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	36.14	36.29

FILE 'EMBASE' ENTERED AT 15:03:24 ON 19 DEC 2001  
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FILE 'CAPLUS' ENTERED AT 15:03:24 ON 19 DEC 2001  
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CA INDEXING COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

=> S QUERCETIN OR 117-39-5/RN  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
L7 24167 QUERCETIN OR 117-39-5/RN

=> S VITAMIN D3 or 67-97-0/rn  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
L8 21931 VITAMIN D3 OR 67-97-0/RN

=> s ascorbyl palmitate or 137-66-6/cn  
'CN' IS NOT A VALID FIELD CODE  
'CN' IS NOT A VALID FIELD CODE  
L9 2436 ASCORBYL PALMITATE OR 137-66-6/CN

=> s 17 and 18 and 19

L10 15 L7 AND L8 AND L9

=> dup rem 110

PROCESSING COMPLETED FOR L10

L11 15 DUP REM L10 (0 DUPLICATES REMOVED)

=> s 111 and py<2001

2 FILES SEARCHED...

L12 12 L11 AND PY<2001

=> d 112 1-12 ab bib kwic

L12 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2001 ACS

AB Cosmetic or dermopharmaceutical patches comprising a hydrocolloid in aq. phase and an active ingredient are disclosed. In 180 g of water were dissolved gellan gum 3, xanthan gum 1, wheat germ 1, preservatives 0.2, orgasol 2, and lavender essential oil 0.15%. The compn. was then spread on a polyamide sheet to obtain the patch.

AN 2000:84281 CAPLUS

DN 132:127736

TI Cosmetic or pharmaceutical patches comprising a hydrocolloid in aqueous phase and an active ingredient

IN Gueret, Jean-Louis H.

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 976396	A1	20000202	EP 1999-401579	19990624 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2781670	A1	20000204	FR 1998-9795	19980730 <--
	FR 2781670	B1	20010907		
	US 2001007671	A1	20010712	US 1999-362680	19990729
	JP 2000080016	A2	20000321	JP 1999-216879	19990730 <--
PRAI	FR 1998-9795	A	19980730		
	FR 1998-9794	A	19980730		
	FR 1998-9880	A	19980731		

RE.CNT 2

RE

(1) Lts Lohmann Therapie-Systeme; DE 4446380 A 1996 CAPLUS

(2) L'Oreal; EP 0309309 A 1989 CAPLUS

PI EP 976396 A1 20000202

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 976396	A1	20000202	EP 1999-401579	19990624 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2781670	A1	20000204	FR 1998-9795	19980730 <--
	FR 2781670	B1	20010907		
	US 2001007671	A1	20010712	US 1999-362680	19990729
	JP 2000080016	A2	20000321	JP 1999-216879	19990730 <--
IT	50-14-6, Vitamin d2	50-21-5, Lactic acid, biological studies	50-81-7, Ascorbic acid, biological studies	57-50-1D, Sucrose, derivs.	58-85-5, Vitamin h 58-95-7, D-.alpha.-Tocopherol acetate 59-02-9, D-.alpha.-Tocopherol 59-30-3, Folic acid, biological studies 67-97-0, Vitamin d3 68-26-8, Retinol

68-26-8D, Retinol, esters 69-72-7, Salicylic acid, biological studies  
 69-72-7D, Salicylic acid, salts and esters 77-92-9, Citric acid,  
 biological studies 79-14-1, Glycolic acid, biological studies  
 79-81-2,  
 Retinol palmitate 81-13-0, Panthenol 83-88-5, Vitamin b2, biological  
 studies 91-53-2, Ethoxyquine 97-59-6, Allantoin 117-39-5,  
**Quercetin** 123-31-9, Hydroquinone, biological studies 123-78-4  
 137-66-6, **Ascorbyl palmitate** 464-92-6, Asiatic acid  
 471-53-4, Glycyrrhetic acid 501-30-4, Kojic acid 515-69-5,  
 .alpha.-Bisabolol 1406-16-2, Vitamin d 1449-05-4, .beta.-  
 Glycyrrhetic acid 2074-53-5, dl-.alpha.-Tocopherol 4602-84-0,  
 Farnesol 7069-42-3, Retinol propionate 7235-40-7, .beta.-Carotene  
 8059-24-3, Vitamin b6 9000-30-0, Guar gum 9000-40-2, Carob gum  
 9004-34-6, Cellulose, biological studies 11032-50-1, Vitamin pp  
 11138-66-2, Xanthan gum 16830-15-2, Asiaticoside 18449-41-7,  
 Madecassic acid 29548-30-9, Farnesyl acetate 71010-52-1, Gellan gum  
 74563-64-7, Phytanetriol 78418-01-6, n-Octanoyl-5-salicylic acid  
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (cosmetic or dermopharmaceutical patches comprising gelling system and  
 hydrocolloid)

L12 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2001 ACS  
 AB Cosmetic patches comprise an authoadhesive polymeric matrix contg. a  
 hydroabsorbent compd. and a cosmetically active compd. A polymeric  
 matrix  
 comprised acid ascorbic 1.5, menthol 0.5, lavender oil 0.1, lactic acid  
 5,  
 polyamide powder (Orgasol) 5, citric acid 1.5, allantoin 2, polyacrylate  
 hydroabsorbent (Aquakeep) 5, and autoadhesive acrylic polymer q.s. 100%.  
 A cosmetic patch comprise the above polymeric matrix 0.2 mm thickness and  
 a polyethylene film having thickness of 200 .mu.m.  
 AN 2000:84265 CAPLUS  
 DN 132:127484  
 TI Cosmetic patches comprising a polymeric matrix  
 IN Gueret, Jean Louis H.  
 PA L'Oreal, Fr.  
 SO Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA French  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 976383	A1	20000202	EP 1999-113705	19990713 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2781668	A1	20000204	FR 1998-9880	19980731 <--
	FR 2781668	B1	20010601		
	US 2001007671	A1	20010712	US 1999-362680	19990729
	JP 2000086494	A2	20000328	JP 1999-219285	19990802 <--
PRAI	FR 1998-9880	A	19980731		
	FR 1998-9794	A	19980730		
	FR 1998-9795	A	19980730		

RE.CNT 9

RE

- (1) E R Squibb & Sons; EP 0190814 A 1986 CAPLUS
- (2) Gangadharan, B; US 5811107 A 1998 CAPLUS
- (3) Glover, M; US 5466456 A 1995 CAPLUS
- (4) L'Oreal; EP 0309309 A 1989 CAPLUS

(5) L'Oreal; EP 0412869 A 1991 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

PI EP 976383 A1 20000202

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 976383	A1	20000202	EP 1999-113705	19990713 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2781668	A1	20000204	FR 1998-9880	19980731 <--
	FR 2781668	B1	20010601		
	US 2001007671	A1	20010712	US 1999-362680	19990729
	JP 2000086494	A2	20000328	JP 1999-219285	19990802 <--
IT	50-14-6, Vitamin d2	50-21-5, Lactic acid, biological studies	50-70-4, Sorbitol, biological studies	56-81-5, Glycerol, biological studies	
	57-55-6, Propylene glycol, biological studies	58-85-5, Vitamin h	58-95-7, D-.alpha.-Tocopherol acetate	59-02-9, D-.alpha.-Tocopherol	
	59-30-3, Folic acid, biological studies	67-97-0, Vitamin d3	68-26-8, Retinol	68-26-8D, Retinol, esters	69-72-7, Salicylic acid, biological studies
	77-92-9, Citric acid, biological studies	79-14-1, Glycolic acid, biological studies	79-81-2, Retinol palmitate	81-13-0, D-Panthenol	83-88-5, Vitamin b2, biological studies
	90-64-2, Mandelic acid	91-53-2, Ethoxyquine	96-26-4, Dihydroxyacetone	107-88-0, Butylene glycol	111-02-4, Squalene
	112-92-5, Stearyl alcohol	117-39-5, Quercetin	123-31-9, Hydroquinone, biological studies	123-78-4	123-99-9, Azelaic acid, biological studies
			137-66-6, Ascorbyl palmitate	1406-16-2, Vitamin d	1449-05-4, .beta.-Glycyrrhetic acid
			464-92-6, Asiatic acid	1406-16-2, Vitamin d	2074-53-5, dl-.alpha.-Tocopherol
			471-53-4, Glycyrrhetic acid	4602-84-0, Farnesol	6915-15-7, Malic acid
			501-30-4, Kojic acid	7069-42-3, Retinol	7069-42-3, Retinol
			515-69-5, .alpha.-Bisabolol	7235-40-7, .beta.-Carotene	8059-24-3, Vitamin b6
			1200-30-4, .beta.-Glycyrrhetic acid	9000-30-0, Guar gum	9000-40-2, Carob gum
			1449-05-4, .beta.-Glycyrrhetic acid	9004-34-6, Cellulose, biological studies	9004-34-6, Cellulose, biological studies
			16485-10-2, DL-Panthenol	9005-25-8, Starch, biological studies	9005-32-7, Alginic acid
			16830-15-2, Asiaticoside	11032-50-1, Vitamin pp	11138-66-2, Xanthan gum
			18449-41-7, Madecassic acid	2074-53-5, dl-.alpha.-Tocopherol	2074-53-5, dl-.alpha.-Tocopherol
			25265-71-8, Dipropylene glycol	39464-87-4, Scleroglucan	29548-30-9, Farnesyl acetate
			29548-30-9, Farnesyl acetate	60908-77-2, Isohexadecane	39464-87-4, Scleroglucan
			71010-52-1, Gellan gum	74563-64-7, Phytanetriol	78418-01-6, Phytanetriol
			78418-01-6, Phytanetriol	80147-09-7, Aquakeep	n-Octanoyl-5-salicylic acid
			80147-09-7, Aquakeep	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)	
			(cosmetic patches comprising polymeric matrix)		

L12 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2001 ACS

AB Cosmetic or dermopharmaceutical patches comprising a gelling system, made from gellan gum, and a hydrocolloid are disclosed. In 180 g of water was dissolved gellan gum 3, xanthan gum 1, wheat germ 1, preservatives 0.2, orgasol 2, and lavender essential oil 0.15%. The compn. was then spread on a polyamide sheet to obtain the patch.

AN 2000:84263 CAPLUS

DN 132:127483

TI Cosmetic or dermopharmaceutical patches comprising a gelling system and a hydrocolloid

IN Gueret, Jean-Louis H.

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 976382	A1	20000202	EP 1999-113704	19990713 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2781667	A1	20000204	FR 1998-9794	19980730 <--
	FR 2781667	B1	20010601		
	BR 9903345	A	20000606	BR 1999-3345	19990723 <--
	CN 1252272	A	20000510	CN 1999-121774	19990729 <--
	US 2001007671	A1	20010712	US 1999-362680	19990729
	JP 2000086496	A2	20000328	JP 1999-216880	19990730 <--
PRAI	FR 1998-9794	A	19980730		
	FR 1998-9795	A	19980730		
	FR 1998-9880	A	19980731		

RE.CNT 8

RE

(2) Fidia Advanced Biopolymers Srl; WO 9417837 A 1994 CAPLUS

(3) Lohmann Therapie Syst Lts; DE 4446380 A 1996 CAPLUS

(5) Meditec, B; WO 9422423 A 1994 CAPLUS

(6) Oreal; EP 0309309 A 1989 CAPLUS

(7) Robert, V; US 5466724 A 1995 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

PI EP 976382 A1 20000202

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 976382	A1	20000202	EP 1999-113704	19990713 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2781667	A1	20000204	FR 1998-9794	19980730 <--
	FR 2781667	B1	20010601		
	BR 9903345	A	20000606	BR 1999-3345	19990723 <--
	CN 1252272	A	20000510	CN 1999-121774	19990729 <--
	US 2001007671	A1	20010712	US 1999-362680	19990729
	JP 2000086496	A2	20000328	JP 1999-216880	19990730 <--

IT 50-14-6, Vitamin d2 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 57-50-1D, Sucrose, derivs. 58-85-5, Vitamin h 58-95-7, D-.alpha.-Tocopherol acetate 59-02-9, D-.alpha.-Tocopherol 59-30-3, Folic acid, biological studies 67-97-0, Vitamin d3 68-26-8, Retinol 68-26-8D, Retinol, esters 69-72-7, Salicylic acid, biological studies 69-72-7D, Salicylic acid, salts and esters 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies

79-81-2, Retinol palmitate 81-13-0, Panthenol 83-88-5, Vitamin b2, biological studies 91-53-2, Ethoxyquine 97-59-6, Allantoin 117-39-5, Quercetin 123-31-9, Hydroquinone, biological studies 123-78-4 137-66-6, Ascorbyl palmitate 464-92-6, Asiatic acid 471-53-4, Glycyrrhetic acid 501-30-4, Kojic acid 515-69-5, .alpha.-Bisabolol 1406-16-2, Vitamin d 1449-05-4, .beta.-Glycyrrhetic acid 2074-53-5, dl-.alpha.-Tocopherol 4602-84-0, Farnesol 7069-42-3, Retinol propionate 7235-40-7, .beta.-Carotene 8059-24-3, Vitamin b6 9000-30-0, Guar gum 9000-40-2, Carob gum 9004-34-6, Cellulose, biological studies 11032-50-1, Vitamin pp 11138-66-2, Xanthan gum 16830-15-2, Asiaticoside 18449-41-7, Madecassic acid 29548-30-9, Farnesyl acetate 71010-52-1, Gellan gum 74563-64-7, Phytanetriol 78418-01-6, n-Octanoyl-5-salicylic acid RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cosmetic or dermatopharmaceutical patches comprising gelling system and

hydrocolloid)

L12 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2001 ACS  
AB A cleaning patch for improving skin conditions comprises a polymeric matrix which contains an active ingredient. A skin patch contained acrylic polymer in Et acetate 69.5%, Blue de Prusse pigment 0.5, urea 20, and salicylic acid 10%. The patch is used for the treatment of acne.

AN 1999:505749 CAPLUS

DN 131:134425

TI Cleaning patch for improving the skin condition

IN Gueret, Jean-Louis

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 933077	A1	19990804	EP 1998-403340	19981230 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2774287	A1	19990806	FR 1998-1070	19980130 <--
	FR 2774287	B1	20000512		
	JP 11269032	A2	19991005	JP 1999-14767	19990122 <--
	CN 1227095	A	19990901	CN 1999-101713	19990129 <--
PRAI	FR 1998-1070		19980130		

RE.CNT 2

RE

(1) Lavipharm; FR 2750050 A 1997 CAPLUS  
(2) The Procter And Gamble Co; WO 9402674 A 1994

PI EP 933077 A1 19990804

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 933077	A1	19990804	EP 1998-403340	19981230 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2774287	A1	19990806	FR 1998-1070	19980130 <--
	FR 2774287	B1	20000512		
	JP 11269032	A2	19991005	JP 1999-14767	19990122 <--
	CN 1227095	A	19990901	CN 1999-101713	19990129 <--

IT 50-14-6, Vitamin d2 50-21-5, biological studies 50-78-2, Acetyl salicylic acid 50-81-7, L-Ascorbic acid, biological studies 57-13-6, Urea, biological studies 57-50-1, Sucrose, biological studies

58-85-5,

Vitamin h 59-02-9, D-.alpha.-Tocopherol 59-30-3, Folic acid, biological studies 67-97-0, Vitamin d3

68-26-8, Retinol 68-26-8D, Retinol, esters 69-72-7, biological studies

77-92-9, biological studies 79-14-1, biological studies 79-81-2, Retinol palmitate 83-88-5, Vitamin b2, biological studies 87-69-4

90-64-2, Mandelic acid 97-59-6, Allantoin 117-39-5,

Quercetin 123-31-9, 1,4-Benzenediol, biological studies

137-66-6, Ascorbyl palmitate 464-92-6, Asiatic acid

471-53-4, Glycyrrhetic acid 501-30-4, Kojic acid 515-69-5, .alpha.-Bisabolol 1309-37-1, Iron oxide (Fe2O3), biological studies

1314-13-2, Zinc oxide, biological studies 1314-23-4, Zirconium oxide, biological studies 1332-37-2, Iron oxide, biological studies

1406-16-2, Vitamin d 1449-05-4, .beta.-Glycyrrhetic acid 4602-84-0, Farnesol 5281-04-9, Dc red # 7 6915-15-7, Malic acid 7069-42-3,

Retinol propionate 7235-40-7, .beta. Carotene 8059-24-3, Vitamin b6 9000-01-5, Gum arabic 9000-30-0, Guar gum 9000-65-1, Gum tragacanth 9002-86-2, Polyvinyl chloride 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9004-34-6D, Cellulose, semi-synthetic derivs.

9004-61-9,

Hyaluronic acid 9005-25-8, Starch, biological studies 10191-41-0, DL-.alpha.-Tocopherol 11032-50-1, Vitamin pp 11118-57-3, Chromium oxide 11129-18-3, Cerium oxide 13463-67-7, Titanium oxide, biological studies 16830-15-2, Asiaticoside 18449-41-7, Madecassic acid 24937-78-8, Ethylene vinyl acetate copolymer 29548-30-9, Farnesyl acetate 52225-20-4, DL-.alpha.-Tocopherol acetate 74563-64-7, Phytanetriol 78418-01-6, n-Octanoyl-5-salicylic acid

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cleaning patch for improving skin condition)

L12 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2001 ACS

AB Patches which deliver lipid-sol. drugs and water-sol. drugs at the same time, comprise hydrophobic polymers contg. the active agents, water absorbents, and oils. A mixt. contg. sweet almond oils (contg. trans-retinol), microcryst. vitamin C, polyacrylic acid powder, and organopolysiloxane (DC 3.6486) was cured and the mixt. was applied on a polyethylene sheet to a thickness of 0.8 mm. The sheet was assembled

with

self-adhesive silicone matrix to give a transdermal patch.

AN 1998:700961 CAPLUS

DN 130:7409

TI Transdermal patches for drug delivery

IN Gueret, Jean-Louis H.

PA L'Oreal S. A., Fr.

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10287559	A2	19981027	JP 1998-93612	19980406 <--
	JP 2865659	B2	19990308		
	FR 2761889	A1	19981016	FR 1997-4498	19970411 <--
	FR 2761889	B1	19991231		
	EP 870498	A1	19981014	EP 1998-400647	19980319 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2232616	AA	19981011	CA 1998-2232616	19980409 <--
	US 6280765	B1	20010828	US 1998-58883	19980413
PRAI	FR 1997-4498	A	19970411		
PI	JP 10287559	A2	19981027	Heisei	
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10287559	A2	19981027	JP 1998-93612	19980406 <--
	JP 2865659	B2	19990308		
	FR 2761889	A1	19981016	FR 1997-4498	19970411 <--
	FR 2761889	B1	19991231		
	EP 870498	A1	19981014	EP 1998-400647	19980319 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2232616	AA	19981011	CA 1998-2232616	19980409 <--
	US 6280765	B1	20010828	US 1998-58883	19980413
IT	50-14-6, Vitamin D2	50-21-5D, Lactic acid, esters		50-78-2,	

Acetylsalicylic acid 57-13-6, Urea, biological studies 58-95-7,  
 D-.alpha.-Tocopherol acetate 59-02-9, D-.alpha.-Tocopherol  
**67-97-0, Vitamin D3** 68-26-8, Retinol  
 69-72-7D, Salicylic acid, esters 77-92-9, Citric acid, biological  
 studies 79-14-1D, Glycolic acid, esters 79-81-2, Retinyl palmitate  
 81-13-0, D-Panthenol 83-88-5, Riboflavin, biological studies 91-53-2,  
 Ethoxyquin 97-59-6, Allantoin 117-39-5, **Quercetin**  
 123-31-9, 1,4-Benzenediol, biological studies 137-66-6, **Ascorbyl**  
**palmitate** 464-92-6, Asiatic acid 471-53-4 501-30-4, Kojic  
 acid 515-69-5, .alpha.-Bisabolol 1406-16-2, Vitamin D 4602-84-0,  
 Farnesol 7069-42-3, Retinyl propionate 7235-40-7, .beta.-Carotene  
 8059-24-3, Vitamin B6 9000-01-5, Arabic gum 9000-30-0, Guar gum  
 9000-65-1, Tragacanth gum 9002-86-2, Polyvinyl chloride 9002-88-4  
 9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic acid 9003-07-0  
 9004-34-6, Cellulose, biological studies 9004-61-9, Hyaluronic acid  
 9005-25-8, Starch, biological studies 9016-00-6, Dimethylsilanediol  
 polymer sru 10191-41-0, DL-.alpha.-Tocopherol 16830-15-2,  
**Asiaticoside**  
 18449-41-7, Madecassic acid 24937-78-8, Ethylene-vinyl acetate  
 copolymer  
 29548-30-9, Farnesyl acetate 31900-57-9, Dimethylsilanediol polymer  
 52225-20-4, DL-.alpha.-Tocopheryl acetate 74563-64-7, Phytantriol  
 78418-01-6, 5-Octanoyl salicylic acid  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (transdermal patches contg. both lipid-sol. compds. and water-sol.  
 compds. on hydrophobic polymeric layer)

L12 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2001 ACS

AB The title cosmetic comprising oily globule with av. diam. of .1toreq.599  
 nm, preferably 200 nm, are disclosed. A hydrating cosmetic lotion  
 contained Span-60 1.5, Tween-61 1, stearic acid 0.5, behenic acid 0.25,  
 stearyl heptanoate 3, vaseline 1, volatile silicone oil 4, jojoba oil 2,  
 vitamin E acetate 0.5, Q2-1403 fluid 2, Pr paraben 0.1, perfume 0.3,  
 glycerin 5, Me paraben 0.3, propylene glycol 3, triethanolamine 0.25, and  
 water q.s. 100%.

AN 1995:549397 CAPLUS

DN 123:92898

TI Cosmetic composition made of an oil in water emulsion based on oily  
 globules coated with a lamellar liquid crystal coating

IN Ribier, Alain; Simonnet, Jean Thierry; Griat, Jacqueline

PA Oreal S. A., Fr.

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 641557	A1	19950308	EP 1994-401880	19940822 <--
	EP 641557	B1	19960821		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	FR 2709666	A1	19950317	FR 1993-10588	19930907 <--
	FR 2709666	B1	19951013		
	AT 141494	E	19960915	AT 1994-401880	19940822 <--
	ES 2094029	T3	19970101	ES 1994-401880	19940822 <--
	BR 9403022	A	19950502	BR 1994-3022	19940831 <--
	PL 176860	B1	19990831	PL 1994-304928	19940905 <--
	CA 2131477	AA	19950308	CA 1994-2131477	19940906 <--
	HU 68819	A2	19950728	HU 1994-2567	19940906 <--
	HU 215115	B	19980928		

CN 1108089	A	19950913	CN 1994-116003	19940906	<--
CN 1070364	B	20010905			
RU 2124884	C1	19990120	RU 1994-31898	19940906	<--
JP 07165530	A2	19950627	JP 1994-213969	19940907	<--
US 5658575	A	19970819	US 1994-301571	19940907	<--
PRAI FR 1993-10588	A	19930907			
PI EP 641557 A1 19950308					
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
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PI EP 641557	A1	19950308	EP 1994-401880	19940822	<--
EP 641557	B1	19960821			
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE					
FR 2709666	A1	19950317	FR 1993-10588	19930907	<--
FR 2709666	B1	19951013			
AT 141494	E	19960915	AT 1994-401880	19940822	<--
ES 2094029	T3	19970101	ES 1994-401880	19940822	<--
BR 9403022	A	19950502	BR 1994-3022	19940831	<--
PL 176860	B1	19990831	PL 1994-304928	19940905	<--
CA 2131477	AA	19950308	CA 1994-2131477	19940906	<--
HU 68819	A2	19950728	HU 1994-2567	19940906	<--
HU 215115	B	19980928			
CN 1108089	A	19950913	CN 1994-116003	19940906	<--
CN 1070364	B	20010905			
RU 2124884	C1	19990120	RU 1994-31898	19940906	<--
JP 07165530	A2	19950627	JP 1994-213969	19940907	<--
US 5658575	A	19970819	US 1994-301571	19940907	<--
IT 50-14-6, Vitamin d2 50-21-5, Lactic acid, biological studies 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 58-95-7, D-.alpha.-Tocopherol acetate 59-02-9, D-.alpha.-Tocopherol 67-97-0, Vitamin d3 68-26-8, Retinol 68-26-8D, Retinol, esters 69-72-7, Salicylic acid, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 81-13-0, D-Panthenol 91-53-2, Ethoxyquine 106-11-6 112-85-6, Behenic acid 117-39-5, Quercetine 137-66-6, Ascorbyl palmitate 464-92-6, Asiatic acid 506-32-1, Arachidonic acid 515-69-5, .alpha.-Bisabolol 1309-37-1, Iron oxide red, biological studies 1406-16-2, Vitamin d 1449-05-4, .beta.-Glycyrrhetic acid 4602-84-0, Farnesol 5466-77-3, Parsolmcx 7235-40-7, Beta carotene 9004-99-3 9005-08-7, Polyoxyethylene distearate 9005-67-8 9005-71-4, Ethoxylated sorbitan tristearate 10191-41-0, DL-.alpha.-Tocopherol 11099-07-3, Glycerol stearate 11140-06-0, Glycerol palmitate 12227-89-3, Iron oxide black 12694-22-3, Diglycerol monostearate 13463-67-7, Titanium oxide, biological studies 16830-15-2, Asiaticoside 18449-41-7, Madecassic acid 26658-19-5, Sorbitan tristearate 27195-16-0, Sucrose distearate 29548-30-9, Farnesol acetate 30233-64-8 39529-26-5, Decaglycerol decastearate 51274-00-1, Iron oxide yellow 52225-20-4, DL-.alpha.-Tocopherol acetate 52357-70-7, Iron oxide brown 56451-84-4, Sorbitan stearate 63119-59-5, Diglycerol distearate 68239-42-9, Glucam e20 71185-87-0 95461-64-6 95461-65-7 99880-64-5 112725-59-4, Butylmethoxydibenzoylmethane 163037-48-7 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (cosmetic compn. made of an oil in water emulsion based on oily globules coated with a lamellar liq. crystal coating)					

L12 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2001 ACS

AB In the NCI, Chemoprevention Branch drug development program, potential

chemopreventive agents are evaluated for efficacy against chem. carcinogen-induced tumors in animal models. This paper summarizes the results of 144 agents in 352 tests using various animal efficacy models. Of these results, 146 were pos., representing 85 different agents. The target organs selected for the animals model are representative of high-incidence human cancers. The assays include inhibition of tumors induced by MNU in hamster trachea, DEN in hamster lung, AOM in rat colon (including inhibition of AOM-induced aberrant crypts), MAM in mouse colon,

DMBA and MNU in rat mammary glands, DMBA promoted by TPA in mouse skin, and OH-BBN in mouse bladder. The agents tested may be classified into various pharmacol. and chem. structural categories that are relevant to their chemopreventive potential. These categories include antiestrogens, antiinflammatories (e.g., NSAIDs), antioxidants, arachidonic acid metab. inhibitors, GST and GSH enhancers, ODC inhibitors, protein kinase C inhibitors, retinoids and carotenoids, organosulfur compds., calcium compds., **vitamin D3** and analogs, and phenolic compds. (e.g., flavonoids). The various categories of compds. have different spectra of efficacy in animal models. In hamster lung, GSH-enhancing agents and antioxidants appear to have high potential for inhibiting carcinogenesis. In the colon, NSAIDs and other antiinflammatory agents appear particularly promising. Likewise, NSAIDs are very active in mouse bladder. In rat mammary glands, retinoids and antiestrogens (as would be expected) are efficacious. Several of the chems. evaluated also appear

to  
the  
be promising chemopreventive agents based on their activity in several of the animal models. Particularly, the ODC inhibitor DFMO was active in colon, mammary glands, the bladder models, while the dithioltione, oltipraz, was efficacious in all the models listed above (i.e., lung, colon, mammary glands, skin, and bladder).

AN 1995:491327 CAPLUS  
DN 122:281655  
TI Preclinical efficacy evaluation of potential chemopreventive agents in animal carcinogenesis models: methods and results from the NCI Chemoprevention Drug Development Program  
AU Steele, Vernon E.; Moon, Richard C.; Lubet, Ronald A.; Grubbs, Clinton J.;  
Reddy, Bandaru S.; Wargovich, Michael; McCormick, David L.; Pereira, Michael A.; Crowell, James A.; et al.  
CS DCPC, National Institutes of Health, Bethesda, MD, 20892, USA  
SO J. Cell. Biochem. (1994), (Suppl. 20), 32-54  
CODEN: JCEBD5; ISSN: 0730-2312  
DT Journal  
LA English  
SO J. Cell. Biochem. (1994), (Suppl. 20), 32-54  
CODEN: JCEBD5; ISSN: 0730-2312  
AB In the NCI, Chemoprevention Branch drug development program, potential chemopreventive agents are evaluated for efficacy against chem. carcinogen-induced tumors in animal models. This paper summarizes the results of 144 agents in 352 tests using various animal efficacy models. Of these results, 146 were pos., representing 85 different agents. The target organs selected for the animals model are representative of high-incidence human cancers. The assays include inhibition of tumors induced by MNU in hamster trachea, DEN in hamster lung, AOM in rat colon (including inhibition of AOM-induced aberrant crypts), MAM in mouse colon,

DMBA and MNU in rat mammary glands, DMBA promoted by TPA in mouse skin, and OH-BBN in mouse bladder. The agents tested may be classified into various pharmacol. and chem. structural categories that are relevant to

their chemopreventive potential. These categories include antiestrogens, antiinflammatories (e.g., NSAIDs), antioxidants, arachidonic acid metab. inhibitors, GST and GSH enhancers, ODC inhibitors, protein kinase C inhibitors, retinoids and carotenoids, organosulfur compds., calcium compds., **vitamin D3** and analogs, and phenolic compds.

(e.g., flavonoids). The various categories of compds. have different spectra of efficacy in animal models. In hamster lung, GSH-enhancing agents and antioxidants appear to have high potential for inhibiting carcinogenesis. In the colon, NSAIDs and other antiinflammatory agents appear particularly promising. Likewise, NSAIDs are very active in mouse bladder. In rat mammary glands, retinoids and antiestrogens (as would be expected) are efficacious. Several of the chems. evaluated also appear

to

be promising chemopreventive agents based on their activity in several of the animal models. Particularly, the ODC inhibitor DFMO was active in

the

colon, mammary glands, the bladder models, while the dithiolthione, oltipraz, was efficacious in all the models listed above (i.e., lung, colon, mammary glands, skin, and bladder).

IT

50-78-2, Aspirin 52-53-9, Verapamil 53-43-0, DHEA 53-86-1, Indomethacin 57-55-6, Propylene glycol, biological studies 57-83-0, Progesterone, biological studies 58-05-9, Folinic acid 58-27-5, Vitamin K3 58-32-2, Dipyridamole 58-55-9, Theophylline, biological studies 58-73-1, Diphenhydramine 58-95-7, Vitamin E Acetate

59-51-8,

DL-Methionine 59-67-6, Nicotinic Acid, biological studies 60-54-8, Tetracycline 61-73-4, Methylene Blue 62-46-4, Thioctic Acid

67-73-2,

Fluocinolone Acetonide 67-97-0, **Vitamin D3**

69-05-6, Quinacrine Hydrochloride 69-65-8, Mannitol 69-93-2, Uric Acid, biological studies 73-31-4, Melatonin 83-46-5,

.beta.-Sitosterol

87-11-6, Thiolutin 99-73-0, 4-Bromophenacyl bromide 107-35-7, Taurine 110-17-8, Fumaric Acid, biological studies 113-92-8, Chlorpheniramine

Maleate 117-39-5, **Quercetin** 121-32-4, Ethylvanillin

121-33-5, Vanillin 121-79-9, Propyl Gallate 125-84-8,

Aminoglutethimide 137-66-6, **Ascorbyl Palmitate**

141-84-4, 2-Thioxo-4-thiazolidinone 145-63-1, Suramin 146-17-8,

Riboflavin 5'-Phosphate 150-13-0, 4-Aminobenzoic Acid 150-76-5,

4-Methoxyphenol 153-18-4, Rutin 154-23-4, (+)-Catechin 156-54-7,

Butyric Acid, Sodium Salt 156-57-0, 2-Mercaptoethylamine Hydrochloride

302-79-4, all-trans-Retinoic Acid 305-01-1, Esculetin 305-84-0,

Carnosine 327-97-9, Chlorogenic Acid 331-39-5, Caffeic Acid

389-36-6, D-Glucaro-1,4-lactone 446-72-0, Genistein 458-37-7,

Curcumin

471-34-1, Calcium Carbonate, biological studies 471-53-4,

18.beta.-Glycyrrhetic Acid 476-66-4, Ellagic Acid 480-16-0, Morin

486-12-4, Triprolidine 500-38-9, Nordihydroguaiaretic Acid 532-11-6,

Anethole Thione 566-48-3, 4-Hydroxyandrostan-4-ene-3,17-dione

569-65-3, Meclizine 592-88-1, Diallyl Sulfide 599-79-1, Sulfasalazine

616-91-1, N-Acetyl-L-cysteine 622-78-6, Benzyl Isothiocyanate

624-49-7, Dimethyl Fumarate 700-06-1, Indole-3-carbinol 814-80-2,

Calcium Lactate 1072-71-5, Bismuthiol I 1135-24-6, Ferulic Acid

2050-87-5, Diallyl Trisulfide 2179-57-9, Diallyl disulfide 2257-09-2,

Phenethyl Isothiocyanate 3073-59-4, Hexamethylene Bisacetamide

3211-76-5, L-Selenomethionine 3766-08-3, d,l-Palmitoylcarnitine

4602-84-0, Farnesol 4759-48-2, 13-cis-Retinoic Acid 5300-03-8,

9-cis-Retinoic Acid 5697-56-3, Carbenoxolone 5989-27-5, d-Limonene

6385-02-0, Sodium Meclofenamate 7235-40-7, .beta.-Carotene 7631-95-0,

Sodium Molybdate 7632-49-7, Calcium Glucarate 7757-93-9 7772-98-7,

Sodium Thiosulfate 8050-81-5, Simethicone 9003-39-8,  
Polyvinylpyrrolidone 10043-52-4, Calcium Chloride, biological studies  
10102-18-8, Sodium Selenite 10540-29-1, Tamoxifen 11103-57-4, Vitamin  
A 13410-01-0, Sodium Selenate 14306-25-3, Sodium Inositol  
Hexaphosphate 14769-73-4, Levamisole 15687-27-1, Ibuprofen  
15826-37-6, Cromolyn Sodium 17211-15-3 19767-45-4, Sodium  
2-Mercaptoethanesulfonate 19771-63-2, L-2-Oxothiazolidine-4-carboxylic  
acid 21593-77-1, S-Allyl-L-cysteine 22071-15-4, Ketoprofen  
25013-16-5, Butylated Hydroxyanisole 25525-21-7, Glucaric Acid  
25614-03-3, 2-Bromo-.alpha.-ergocryptine 28302-36-5, Sodium copper  
chlorophyllin 32042-43-6, DL-Arginine Hydrochloride 32222-06-3, Ro  
21-5535 36322-90-4, Piroxicam 36439-43-7, D-Glucaric acid, potassium  
salt 37311-39-0, Vitamin E Succinate 38194-50-2, Sulindac  
52942-31-1, Etopеридоне 54965-24-1, Tamoxifen citrate 55268-74-1,  
Praziquantel 57817-89-7, Stevioside 61665-15-4, RU 16117  
64224-21-1,  
Oltipraz 65646-68-6, 4-HPR 65666-07-1, Silymarin 67037-37-0, DFMO  
72629-69-7, Sarcophytol A 75078-91-0, Temarotene 75775-33-6, Purpurin  
89778-26-7, Toremifene 94497-51-5, Am 80 99519-84-3, CAI  
102121-60-8, Am 580 110368-33-7, Ch 55 112859-71-9 118694-43-2, Ro  
23-7553 124409-58-1, Ro 24-2637 129731-10-8, (+)-Vorozole  
133920-06-6, 6-Phenylhexyl Isothiocyanate 137102-93-3, Ro 24-5531  
160371-97-1, BASF-47851 160372-07-6, Ro 16-9100 160372-08-7, Ro  
19-2968  
RL: BAC (Biological activity or effector, except adverse); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(preclin. efficacy evaluation of potential cancer chemopreventive  
agents in animal carcinogenesis models)

L12 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2001 ACS

AB Ninety potential chemopreventive agents were screened using 6  
chemoprevention-assocd. biochem. end points. These compds. were tested  
using rodent (tracheal epithelial or liver) cells and human cells  
[neonatal foreskin fibroblasts, bronchial epithelial cells, or human  
leukemic cells (HL-60)]. The effects measured were: (a) inhibition of  
12-O-tetradecanoylphorbol-13-acetate (TPA)-induced ornithine  
decarboxylase  
(ODC) activity in rat tracheal epithelial cells; (c) inhibition of  
poly(ADP-ribose)polymerase in propane sultone-treated primary human  
fibroblasts; (d) inhibition of benzo[a]pyrene (B[a]P)-DNA binding in  
human  
bronchial epithelial cells; (e) induction of reduced glutathione in  
Buffalo rat liver cells; and (f) inhibition of TPA-induced free radical  
formation in primary human fibroblasts or HL-60 cells. Fifty compds.  
were  
highly effective in inhibiting TPA-induced tyrosine kinase activity.  
This  
assay identified compds. from a wide variety of chem. classes as  
effective  
inhibitors, including all the vitamins, retinoic acid analogs, protein  
kinase C inhibitors, and chems. belonging to the amino acid category.  
Fifty-two chems. were classified as highly pos. compds. when examd. for  
their ability to inhibit TPA-induced ODC activity. These agents showed a  
dose-dependent inhibition or inhibition at all doses. Retinoids, in  
general, exhibited strong inhibition of ODC activity. A category of  
compds. showing dose-dependent inhibition were the sulfur compds., esp.  
the thiols and thiones. Among the natural products, terpenes were strong  
inhibitors of ODC. Forty-seven compds. were classified as strong  
inhibitors of poly(ADP-ribose)polymerase. In the carcinogen-DNA binding  
inhibition assay, 21 compds. were identified as strong inhibitors, which

include phenolic compds. as well as sulfur compds. Vitamins and their analogs were also good inhibitors. Testing for induced glutathione yielded 19 compds. that were good inducers. Sulfur-contg. compds. and most of the phenolic compds. were also inducers of glutathione. Twenty compds. were highly pos. for inhibition of TPA-induced free radical formation. A significant no. of phenolic and sulfur compds. were again strong oxygen radical scavengers. Some antiinflammatory agents were also identified as free radical inhibitors. In general, retinoids were quite active in all the assays. Eight compds. were pos. in all of the six assays; these were vitamin C (ascorbic acid), bismuththiol, esculetin, etoperidone, folic acid, hydrocortisone, indole-3-carbinol, and tocopherol

succinate. Agents that were pos. in these assays may inhibit the carcinogenesis process by similar mechanisms in humans and are identified as candidates for development as chemopreventive agents. Agents capable of inhibiting multiple mechanisms are regarded as highly promising agents for cancer chemoprevention.

AN 1995:209906 CAPLUS  
DN 122:71455  
TI Screening of potential chemopreventive agents using biochemical markers of carcinogenesis  
AU Sharma, Sheela; Stutzman, Jill D.; Kelloff, Gary J.; Steele, Vernon E.  
CS Cell. Mol. Toxicol., ManTech Environ. Technol., Inc., Research Triangle Park, NC, 27709, USA  
SO Cancer Res. (1994), 54(22), 5848-55  
CODEN: CNREA8; ISSN: 0008-5472  
DT Journal  
LA English  
SO Cancer Res. (1994), 54(22), 5848-55  
CODEN: CNREA8; ISSN: 0008-5472  
IT 50-23-7, Hydrocortisone 50-78-2, Aspirin 50-81-7, Vitamin C, biological studies 52-53-9, Verapamil 53-03-2, Prednisone 53-43-0, Dehydroepiandrosterone 53-86-1, Indomethacin 57-83-0, Progesterone, biological studies 58-27-5, Vitamin K3 58-95-7, .alpha.-Tocopherol acetate 59-30-3, Folic acid, biological studies 59-67-6, Nicotinic acid, biological studies 60-87-7, Promethazine 62-46-4, Thioctic acid 67-73-2, Fluocinolone acetonide 67-97-0, Vitamin D3 68-26-8, Retinol 81-54-9, Purpurin 81-88-9, Rhodamine B 83-46-5, .beta.-Sitosterol 87-11-6, Thiolutin 92-43-3, Phenidone 107-35-7, Taurine 110-17-8, Fumaric acid, biological studies 117-39-5, Quercetin 121-32-4, Ethyl vanillin 121-33-5, Vanillin 121-79-9, Propyl gallate 129-46-4, Sodium suramin 137-66-6, Ascorbyl palmitate 146-17-8, Riboflavin 5'-(dihydrogen phosphate) 153-18-4, Rutin 154-23-4, Catechin 156-54-7, Sodium butyrate 302-79-4, Retinoic acid 305-01-1, Esculetin 305-84-0, L-Carnosine 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 458-37-7, Curcumin 471-53-4, 18.beta.-Glycyrrhetic acid 476-66-4, Ellagic acid 500-38-9, Nordihydroguaiaretic acid 532-11-6, Anethole trithione 576-42-1 592-88-1, Diallyl sulfide 616-91-1, N-Acetyl-L-cysteine 622-78-6, Benzyl isothiocyanate 700-06-1, Indole-3-carbinol 1072-71-5, Bismuththiol I 2179-57-9, Diallyl disulfide 2257-09-2, Phenethyl isothiocyanate 2578-28-1, D,L-Selenomethionine 3211-76-5, L-Selenomethionine 3375-50-6, 2-Mercaptoethanesulfonic acid 5027-63-4, Glucaro-1,4-lactone 5697-56-3, Carbenoxolone 5793-88-4, Calcium D-glucarate 5989-27-5, D-Limonene 6819-24-5, Palmitoyl carnitine hydrochloride 7235-40-7, .beta.,.beta.-Carotene 7631-95-0, Sodium molybdate 7772-98-7, Sodium thiosulfate 10102-18-8, Sodium selenite 10540-29-1, Tamoxifen 13410-01-0, Sodium selenate

14769-73-4, Levamisole 15687-27-1, Ibuprofen 17407-37-3,  
.alpha.-Tocopherol succinate 19750-45-9, 2-Oxothiazolidine-4-carboxylic  
acid 22916-47-8, Miconazole 25525-21-7, Glucaric acid 36322-90-4,  
Piroxicam 39746-25-3 52942-31-1, Etooperidone 55268-74-1,  
Praziquantel 64224-21-1, Oltipraz 65595-90-6, (N-6-Aminohexyl)-5-  
chloro-1-naphthalenesulfonamide 65646-68-6, N-(4-  
Hydroxyphenyl)retinamide 65666-07-1, Silymarin 70052-12-9  
75078-91-0, Temarotene 75330-75-5, Lovastatin 75775-33-6, Purpurin  
112859-71-9 160371-97-1, BASF 47851 160372-07-6, Ro 16-9100  
160372-08-7, Ro 19-2968  
RL: BAC (Biological activity or effector, except adverse); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(screening of potential chemopreventive agents using biochem. markers  
of carcinogenesis)

L12 ANSWER 9 OF 12 USPATFULL

AB The present invention relates to a substantially dry, disposable, personal cleansing article useful for both cleansing the skin or hair, and more particularly to a disposable, cleansing article having a substrate which preferably comprises of multiple layers. These articles are used by the consumer by wetting the dry article with water. The article comprises a water insoluble substrate having at least a first portion that is wet extensible and at least a second portion that is less wet extensible than said first portion and a lathering surfactant. Preferably, the articles of the present invention further comprise a conditioning component.

AN 2000:160606 USPATFULL

TI Cleansing and conditioning article for skin or hair

IN McAtee, David Michael, Mason, OH, United States  
Nissing, Nicholas James, Cincinnati, OH, United States  
Hasenoehrl, Erik John, Loveland, OH, United States  
Cabell, David William, Cincinnati, OH, United States

PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)

PI US 6153208 20001128

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AI US 1998-152034 19980911 (9)

PRAI US 1997-58608 19970912 (60)

US 1998-72440 19980126 (60)

US 1998-85495 19980514 (60)

DT Utility

FS Granted

EXNAM Primary Examiner: Dodson, Shelley A.; Assistant Examiner: Lamm, Marina

LREP Allen, George W., Tsuneki, Fumiko

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN 8 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 3452

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PI US 6153208 20001128

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DETD . . . octopirox; panthenol; 1-pentadecanol; peonia extract; peppermint extract; phelladendron extract; 2-phenyl-benzothiophene derivatives; phloretin; PHLOROGINE (available from Secma); phosphatidyl choline; proteolytic enzymes; **quercetin**; red sandalwood extract; rosemary extract; rutin; sage extract; skull cap extract;

siber hegner extract; siberian saxifrage extract; silicol; sodium lauryl. . . hydroabietic acid; thyme extract; tioxolone; tocopherol; trehalose 6-undecylenoate; 3 tridecene-2-ol; tropolone; UNITRIENOL T27 (available from Unichem, located in Gouda, Netherlands); **vitamin D3** and its analogs; white thyme oil; wogonin; Ylang Ylang; zinc

glycerolate; zinc linoleate; zinc oxide; zinc pyrithione; zinc sulfate and. . . .

DETD . . . dihydrogen phosphate; anise extracts; AOSINE (available from Secma); ASC III (available from E. Merck, located in Darmstadt, Germany); ascorbic acid; **ascorbyl palmitate**; asiatic acid; asiaticosides; ARLAMOL GEO.TM. (available from ICI, located in Wilmington, Del.); azaleic acid; benzoic acid derivatives; bertholletia extracts; betulinic. . . Serobiologiques); soya extracts; spleen extracts; tachysterol; tazarotene; thymulen; thymus extracts; tigogenin; tocopheryl retinoate; traumatic acid; tricholine citrate; trifoside; ursolic acid; **vitamin D3** and its analogs; yam extract; yamogenin; zeatin; and mixtures thereof.

DETD . . . acid; SUPER STEROL ESTERS (available from Croda); thioctic acid; THSC CERAMIDE OIL (available from Campo Research); trimethyl glycine; tocopheryl nicotinate; **vitamin D3**; Y2 (available from Ocean Pharmaceutical); and mixtures thereof.

DETD . . . examples of skin lightening actives useful herein include adapalene, aloe extract, ammonium lactate, anethole derivatives, apple extract, arbutin, ascorbic acid, **ascorbyl palmitate**, azelaic acid, bamboo extract, bearberry extract, bletilla tuber, bupleurum falcatum extract, burnet extract, butyl hydroxy anisole,

butyl hydroxy toluene, Chuanxiong, . . . palmitate, linoleate), 2,4 resorcinol derivatives, 3,5 resorcinol derivatives, rose fruit extract, salicylic acid, Song-Yi extract, 3,4,5 trihydroxybenzyl derivatives, tranexamic acid, **vitamin D3** and its anaologs, and mixtures thereof.

L12 ANSWER 10 OF 12 USPATFULL

AB The present invention pertains generally to the field of Public Health, including the prevention and treatment of coronary heart disease which is currently the first cause of death in the American population. More specifically, the present invention concerns a total modular system of multivitamin and mineral supplementation composed of 7 distinct modules for improving public health by insuring adequate intake of micronutrients needed for disease prevention and protection against nutritional losses and deficiencies due to, for example, lifestyle factors and common inadequate dietary patterns. A module, as used

herein throughout, is defined as a separate and distinct combination of vitamin-mineral and other health promoting compounds which are directed to specific target populations. The formulations of the present invention which, when combined in one capsule or tablet or as separate modules, exert a joint and enhancing effect on the major pathogenetic factors involved in the atherosclerotic process. Moreover, certain modular formulations of the present invention incorporate both antioxidants and acetylsalicylic acid (aspirin) as a single preventive modality. Such a combination of antioxidants and aspirin is believed to act to prevent oxidation of low density lipoproteins within coronary arterial walls and to cause platelet deagglutination thereby inhibiting thrombus formation. The benefit of preventing these two major processes is believed to reduce the risk of coronary heart disease.

AN 1999:136718 USPATFULL  
TI Modular system of dietary supplement compositions for optimizing health benefits and methods

IN Riley, Patricia A., Sunrise, FL, United States

PA Medical Doctors' Research Institute, Inc., Sunrise, FL, United States (U.S. corporation)

PI US 5976568 19991102

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AI US 1997-803587 19970221 (8)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Dees, Jose' G.; Assistant Examiner: Shelborne, Kathryne E.  
LREP Holland & Knight LLP  
CLMN Number of Claims: 5  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1702  
PI US 5976568 19991102 <--  
SUMM The bioflavonoid **quercetin** scavenges the superoxide anion radical directly and inhibits cyclooxygenase as does aspirin. See Chung-Kuo, Yao Li Hsueh, Pao Acta pharmacologica. . .  
DETD The formulas may contain other synergistic dietary or nutritional compounds such as garlic, bioflavonoids, **quercetin**, capsicum, boron, melatonin & DHEA. The formulas may also contain glycerol, sorbitol, sucrose, magnesium stearate and other excipients and binders..  
DETD . . . 6 mcg Vitamin C\* (Buffered Calcium Ascorbate, 150 mg 150 mg 600 mg 100 mg 200 mg Ascorbic Acid and **Ascorbyl Palmitate**) **Vitamin D3** (Cholecalciferol) 300 IU 100 IU -- Vitamin E (d-alpha Tocopheryl Succinate) 60 IU 40 IU 30 IU 100 IU 200. . . mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg Green Tea Extract 25 mg 50 mg **Quercetin** 50 mg 200 mg Hawthorne Berries\* (Flavones) 2 mg 5 mg Alpha Lipoic Acid 30 mg 100 mg  
DETD . . . 6 mcg Vitamin C\* (Buffered Calcium Ascorbate, 150 mg 100 mg 600 mg 100 mg 200 mg Ascorbic Acid and **Ascorbyl Palmitate**) **Vitamin D3** (Cholecalciferol) 300 IU 100 IU -- Vitamin E (d-alpha Tocopheryl Succinate) 70 IU 30 IU 30 IU 100 IU 200. . . mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg Green Tea Extract 25 mg 50 mg **Quercetin** 50 mg 200 mg Hawthorne Berries\* (Flavones) 2 mg 5 mg Alpha Lipoic Acid 30 mg 100 mg  
CLM What is claimed is:  
from . Alpha Lipoic Acid; from about 15.0 to about 1,000 mg of Taurine; about 0.0 to about 500 mg of **Quercetin**; and from about 0.0 to about 500 mg of odorless Garlic.  
. Extract, from about 25 to about 50 mg of Green Tea Extract, from about 50 to about 200 mg of **Quercetin**, from about 2 to about 5 mg of Hawthorne Berries, and from about 30 to about 100 mg of Alpha. .  
L12 ANSWER 11 OF 12 USPATFULL  
AB The present invention pertains generally to the field of Public Health, including the prevention and treatment of coronary heart disease which is currently the first cause of death in the American population. More specifically, the present invention concerns a total modular system of multivitamin and mineral supplementation composed of 7 distinct modules for improving public health by insuring adequate intake of micronutrients needed for disease prevention and protection against nutritional losses and deficiencies due to, for example, lifestyle factors and common inadequate dietary patterns. A module, as used herein throughout, is defined as a separate and distinct combination of vitamin-mineral and other health promoting compounds which are directed

to specific target populations. The formulations of the present invention which, when combined in one capsule or tablet or as separate modules, exert a joint and enhancing effect on the major pathogenetic factors involved in the atherosclerotic process. Moreover, certain modular formulations of the present invention incorporate both antioxidants and acetylsalicylic acid (aspirin) as a single preventive modality. Such a combination of antioxidants and aspirin is believed to act to prevent oxidation of low density lipoproteins within coronary arterial walls and to cause platelet deagglutination thereby inhibiting thrombus formation. The benefit of preventing these two major processes is believed to reduce the risk of coronary heart disease.

AN 1999:106123 USPATFULL  
TI Acetylsalicylic acid and micronutrient supplementation for nutritional losses and coronary heart disease  
IN Riley, Patricia A., Sunrise, FL, United States  
Christakis, George, Sunrise, FL, United States  
PA Medical Doctor's Research Institute, Inc., Sunrise, FL, United States (U.S. corporation)  
PI US 5948443 19990907 <--  
AI US 1997-804494 19970221 (8)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Moezie, Minna  
LREP Holland & Knight LLP  
CLMN Number of Claims: 1  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1608  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
PI US 5948443 19990907 <--  
SUMM The bioflavonoid **quercetin** scavenges the superoxide anion radical directly and inhibits cyclooxygenase as does aspirin. See Gu Zhen-Lun et al., *Acta pharmacologica Sinica*... . .  
DETD The formulas may contain other synergistic dietary or nutritional compounds such as garlic, bioflavonoids, **quercetin**, capsicum, boron, melatonin & DHEA. The formulas may also contain glycerol, sorbitol, sucrose, magnesium stearate and other excipients and binders..  
DETD . . . 6 mcg Vitamin C\* (Buffered Calcium Ascorbate, 150 mg 150 mg 600 mg 100 mg 200 mg Ascorbic Acid and **Ascorbyl Palmitate**) **Vitamin D3** (Cholecalciferol) 300 IU 100 IU -- Vitamin E (d-alpha Tocopheryl Succinate) 60 IU 40 IU 30 IU  
Acid 100 IU 200. . . mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg Green Tea Extract 25 mg 50 mg **Quercetin** 50 mg 200 mg Hawthorne Berries\* (Flavones) 2 mg 5 mg Alpha Lipoic  
DETD . . . 6 mcg Vitamin C\* (Buffered Calcium Ascorbate, 150 mg 100 mg 600 mg 100 mg 200 mg Ascorbic Acid and **Ascorbyl Palmitate**) **Vitamin D3** (Cholecalciferol) 300 IU 100 IU -- Vitamin E (d-alpha Tocopheryl Succinate) 70 IU 30 IU 30 IU  
Acid 100 IU 200. . . mg L-Carnitine 50 mg 200 mg Grape Seed Extract 25 mg 50 mg Green Tea Extract 25 mg 50 mg **Quercetin** 50 mg 200 mg Hawthorne Berries\* (Flavones) 2 mg 5 mg Alpha Lipoic  
30 mg 100 mg

L12 ANSWER 12 OF 12 USPATFULL

AB Cosmetic or dermatological compositions comprising an oil-in-water type emulsion containing oily globules which are coated with a lamellar liquid crystal coating and are dispersed in an aqueous phase, in which each oily globule contains at least one lipophilic compound which is cosmetically or dermatologically active and is individually coated with a monolamellar or oligolamellar layer of at least one lipophilic surface-active agent, at least one hydrophilic surface-active agent,

and

at least one fatty acid, the coated oily globules having a mean diameter

of less than 500 nanometers, preferably less than 200 nanometers, and the oily phase contains a basic agent in the dissolved state, exhibit good skin and hair penetration.

AN 97:73292 USPATFULL

TI Cosmetic or dermatological composition comprising an oil-in-water emulsion based on oily globules provided with a lamellar liquid crystal coating

IN Ribier, Alain, Paris, France

Simonnet, Jean-Thierry, Paris, France

Griat, Jacqueline, Ablon, France

PA L'Oreal, Paris, France (non-U.S. corporation)

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PI US 5658575 19970819

AI US 1994-301571 19940907 (8)

PRAI FR 1993-10588 19930907

DT Utility

FS Granted

EXNAM Primary Examiner: Bleutge, John C.; Assistant Examiner: Harrison, Robert

H.

LREP Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

CLMN Number of Claims: 30

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1027

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PI US 5658575 19970819

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DETD D-.alpha.-tocopherol, DL-.alpha.-tocopherol, D-.alpha.-tocopherol acetate, DL-.alpha.-tocopherol acetate, **ascorbyl palmitate**, glycerides of vitamin F, vitamin D, vitamin D.sub.2, vitamin D.sub.3, retinol, retinol esters (retinol palmitate, retinol propionate), .beta.-carotene, D-panthenol, farnesol, . . . from milk, phospholipids of marine origin which are rich in polyunsaturated essential acids, ethoxyquine, extract of rosmarin, extract of balm, **quercetin**, extract of dried microalgae (algoxan red from Algatec), essential oil of bergamot, octyl methoxycinnamate (Parsol MCX--Givaudan-Roure), butylmethoxydibenzoylmethane (Parsol 1789--Givaudan-Roure), octyl. . .

DETD . . . under

the name "TWEEN 61"

Stearic acid 0.75%

D-.alpha.-Tocopherol acetate 1.0%

Vitamin F glycerides 2.0%

Retinol palmitate assayed at 1500 IU/mg

0.5%

marketed by the company FLUKA

**Ascorbyl palmitate** 0.5%

Mixture of farnesol and farnesyl

2%

acetate marketed by the company  
INDUCHEM under the name "UNIBIOVIT B 33"  
Blackcurrant oil 3%  
Ethoxyquine 0.03%

Phase B:

Glycerine. . .

CLM What is claimed is:

. . . 21, wherein said fatty or lipophilic substance is selected from the group consisting of D-.alpha.-tocopherol DL-.alpha.-tocopherol, D-.alpha.-tocopherol acetate, DL-.alpha.-tocopherol acetate, **ascorbyl palmitate**, glycerides of vitamin F, vitamin D, vitamin D.sub.2, vitamin D.sub.3, retinol, retinol esters, .beta.-carotene, D-panthenol, farnesol, farnesyl acetate, oils of. . .

from milk, phospholipids of marine origin which are rich in polyunsaturated essential acids, ethoxyquine, extract of romarin, extract of balm, **quercetin**, extract of dried microalgae, essential oil of bergamot, octyl methoxycinnamate, butylmethoxydibenzoylmethane, octyl triazole, yellow, brown, black and red iron oxides, . . .

. . . 24, wherein said fatty or lipophilic substance is selected from the group consisting of D-.alpha.-tocopherol DL-.alpha.-tocopherol, D-.alpha.-tocopherol acetate, DL-.alpha.-tocopherol acetate, **ascorbyl palmitate**, glycerides of vitamin F, vitamin D, vitamin D.sub.2, vitamin D.sub.3, retinol, retinol esters, .beta.-carotene, D-panthenol, farnesol, farnesyl acetate, oils of. . .

from milk, phospholipids of marine origin which are rich in polyunsaturated essential acids, ethoxyquine, extract of romarin, extract of balm, **quercetin**, extract of dried microalgae, essential oil of bergamot, octyl methoxycinnamate, butylmethoxydibenzoylmethane, octyl triazole, yellow, brown, black and red iron oxides, . . .

IT 50-14-6, Vitamin d2 50-21-5, Lactic acid, biological studies  
57-10-3,

Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 58-95-7, D-.alpha.-Tocopherol acetate 59-02-9, D-.alpha.-Tocopherol **67-97-0**, Vitamin d3 68-26-8, Retinol 68-26-8D, Retinol, esters 69-72-7, Salicylic acid, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 81-13-0, D-Panthenol 91-53-2, Ethoxyquine 106-11-6 112-85-6, Behenic acid **117-39-5**, Quercetine 137-66-6, Ascorbyl palmitate 464-92-6, Asiatic acid 506-32-1, Arachidonic acid 515-69-5, .alpha.-Bisabolol 1309-37-1, Iron oxide red, biological studies 1406-16-2, Vitamin d 1449-05-4, .beta.-Glycyrrhetic acid 4602-84-0, Farnesol 5466-77-3, Parsolmcx 7235-40-7, Beta carotene 9004-99-3 9005-08-7, Polyoxyethylene distearate 9005-67-8 9005-71-4, Ethoxylated sorbitan tristearate 10191-41-0, DL-.alpha.-Tocopherol 11099-07-3, Glycerol stearate 11140-06-0, Glycerol palmitate 12227-89-3, Iron oxide black 12694-22-3, Diglycerol monostearate 13463-67-7, Titanium oxide, biological studies 16830-15-2, Asiaticoside 18449-41-7, Madecassic acid 26658-19-5, Sorbitan tristearate 27195-16-0, Sucrose distearate 29548-30-9, Farnesol acetate 30233-64-8 39529-26-5, Decaglycerol decastearate 51274-00-1, Iron oxide yellow 52225-20-4, DL-.alpha.-Tocopherol acetate 52357-70-7, Iron oxide brown 56451-84-4, Sorbitan stearate 63119-59-5, Diglycerol distearate 68239-42-9, Glucam e20 71185-87-0 95461-64-6 95461-65-7 99880-64-5 112725-59-4, Butylmethoxydibenzoylmethane 163037-48-7 (cosmetic compn. made of an oil in water emulsion based on oily

globules coated with a lamellar liq. crystal coating)



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